# **DRAFT**



# CMIPS II REQUEST FOR PROPOSAL

# Section 6 TECHNICAL REQUIREMENTS Statement of Work (SOW)

# SECTION 6 – TECHNICAL REQUIREMENTS STATEMENT OF WORK (SOW)

1	INTRODUCTION	7
2	BACKGROUND	7
	2.1 References	7
	2.2 Project Organization	
	2.2.1 California Department of Social Services (CDSS) Adult Programs Brand	ch (APB)7
	2.2.2 Health and Human Services Agency Data Center (HHSDC)	
	2.2.2.1 CMIPS Project Office	
	2.2.2.2 HHSDC Services	8
	2.2.3 System Users	9
	2.2.4 Customers	9
	2.2.5 Control Agencies	10
	2.2.5.1 Department of General Services (DGS)	
	2.2.5.2 California Health and Human Services Agency (CHHSA)	10
	2.2.5.3 Department of Finance (DOF)	10
	2.2.5.4 California Legislature and Governor	10
	2.2.5.5 Department of Health Services (DHS)	10
	2.2.5.6 Centers for Medicare and Medicaid Services (CMS)	
	2.2.6 Advisory and Advocate Groups	
	2.2.6.1 California Welfare Directors Association (CWDA)	
	2.2.6.2 California Association of Public Authorities (CAPA)	
	2.2.6.3 California State Association of Counties (CSAC)	
	2.2.6.4 IHSS Advisory Committees	
	2.2.6.5 Labor Organizations	
	2.2.7 Interface Agencies	
	2.3 PROJECT CONSTRAINTS	12
3	PROJECT MANAGEMENT	12
	3.1 Project Planning	13
	3.1.1 Project Master Plan (PMP)	14
	3.1.2 Master Work Plan	15
	3.1.3 Schedule	16
	3.1.4 Budget Planning	17
	3.2 CONTROL PROCESSES	17
	3.2.1 Schedule and Budget Management	17
	3.2.1.1 Tracking DDI Activities	
	3.2.1.2 Tracking Maintenance Activities	19
	3.2.1.3 Tracking Fixed-Price Operations Activities	19
	3.2.1.4 Tracking Fixed-Rate Operations Activities	20
	3.2.1.5 Schedule and Budget Metrics	21
	3.2.2 Staffing Management	21

	3.2.2.1	Project Staffing Plan	. 22
	3.2.2.2	$\mathcal{C}$	
	3.2.2.3	Key Staff	. 23
	3.2.2	2.3.1 Contractor Project Director	
	3.2.2	2.3.2 Contractor Project Manager	
		2.3.3 Contractor Project/Contract Administrator	
		2.3.4 Contractor Technical Project Manager	
		2.3.5 Contractor Operations Manager	
		2.3.6 Contractor Systems Implementation Manager	
		2.3.7 Contractor Test Manager	
		2.3.8 Contractor Customer Service Manager	
		2.3.9 Funding Source Management Analyst	
		2.3.10 Contractor Legal Services Support	
		2.3.11 Contractor Training Manager	
	3.2.3	Deliverable Standards and Acceptance Process	
	3.2.3.1	$\mathcal{C}$	
	3.2.3.2	1	
	3.2.3.3	11	
	3.2.3.4	$\iota$	
	3.2.4	Issue Management	
	3.2.5	Change Management	
	3.2.6	Configuration Management	
	3.2.7 3.2.8	Risk ManagementProject Metrics	
	3.2.6 3.2.9	Quarterly Project Management Reviews	
	3.2.9 3.2.10	Corrective Action Plan (CAP)	
		JECT INITIATION	
		JECT CLOSEOUT	
_			
4	TECHN	ICAL PROCESSES	. 43
	4.1 Sys	TEM DEVELOPMENT	. 43
	4.1.1	System Development Planning	. 43
	4.1.2	System Requirements Validation	. 44
	4.1.3	Concept of Operations Scenarios	. 45
	4.1.4	General System Design (GSD)	. 48
	4.1.5	Detailed System Design (DSD)	. 49
	4.1.6	Coding and Documentation	
	4.1.7	Development Phase Reporting and Metrics	
		TEM TEST AND EVALUATION	
	4.2.1	Test and Evaluation Roles and Responsibilities	
	4.2.2	Test Planning and Deliverables	
	4.2.3	Software Unit and Component Testing	
	4.2.4	Integration Testing	
	4.2.5	System Qualification Testing	
	4.2.5.1	$\mathcal{E}$	
	4.2.5.2	System Performance Testing	. 60

4.2	.5.2.1 Online Performance Testing	61
4.2	.5.2.2 Batch Performance Testing	
4.2	.5.2.3 System Stress Testing	
4.2.5.	3 Regression Testing	63
4.2.5.		
4.2.6	Release Readiness Review	
4.2.7	System Test and Evaluation Reporting and Metrics	66
4.3 SY	STEM MAINTENANCE AND ENHANCEMENTS	66
4.3.1	System Maintenance and Enhancement Overview	66
4.3.2	Project Maintenance Planning	
4.3.3	Modification Management	67
4.3.4	Defect Corrections	68
4.3.5	Release Management	
4.3.5.	$\mathcal{C}$	
4.3.5.	<b>5</b>	
4.3.5.	- 8	
4.3.5.	<i>y</i>	
4.3.5.		
4.3.5.	$\mathcal{S}$ . If $\mathcal{S}$	
	STEM ADMINISTRATION	
4.4.1	System Operation Planning	
4.4.2	Data Distribution	
4.4.3	Capacity Planning and Management	
4.4.4	Operations Management	
4.4.5	System Security	
4.4.6	Backup and Recovery	
4.4.7	Data Archive	
4.4.8	Disaster Recovery	
4.4.9 4.4.10	Customer Service/Help Desk	
	System Administration Reporting and Metrics ATEWIDE IMPLEMENTATION	
4.5 317 4.5.1		
4.5.1 4.5.2	Implementation Roles and ResponsibilitiesStatewide Implementation Planning	
4.5.2 4.5.3	Business Change Management	
4.5.3		
4.5.3.	·	
4.5.4	System Deployment Preparation	
4.5.4.		
4.5.4.	<u>=</u>	
4.5.4.		
4.5.4.	- · · · · · · · · · · · · · · · · · · ·	
	.4.4.1 Training Planning	
	.4.4.2 Implementation Training	
	.4.4.3 Ongoing Training	
	.4.4.4 Self-Paced Training	
	.4.4.5 Fee-Based New CMIPS II User Training	

		.4.4.6 Project Support Training	
		4.4.7 Training Materials	
		.4.4.8 Public Outreach	
	4.5.4.	<b>r</b>	
	4.5.5	Release Installation	
	4.5.6	Pilot Operation	
	4.5.7	County Deployment	
	4.5.7.	J 1 J &	
	4.5.7.	J 1 J	
	4.5.7.	J 11	
	4.5.8	CDSS Deployment	
	4.5.8.	1 5	
	4.5.8.	1 2	
	4.5.8.	1 1	
	4.5.9	Business Services Migration	
	4.5.10	Implementation Reviews	
	4.5.11	Implementation Reporting and Metrics	
		OGRAM SUPPORT	104
	4.6.1	Program Support Planning	104
	4.6.2	Case Management Services	
	4.6.3	Payroll Processing Services	
	4.6.3.	$\mathcal{E}$	
	4.6.3.		
	4.6.3.	3 W2	107
	4.6.3.	4 Withholding Management	108
	4.6.3.	5 Liens	108
	4.6.3.	6 Warrant Problem Management	109
	4.6	3.6.1 Lost, Never Received or Mutilated Warrants	109
	4.6	.3.6.2 Stale Dated Warrants	110
	4.6.3.	7 Timesheet Processing	110
	4.6.4	Program Integrity Services	111
	4.6.5	Funding Source Management	111
	4.6.6	Website Management	111
	4.6.7	Forms Support	113
	4.6.8	Reporting Support	113
	4.6.9	Project Service Requests	113
	4.6.10	CDSS APB Infrastructure Support	114
	4.6.11	Legal Impact Analysis Services	114
	4.6.12	Program Support Reporting and Metrics	115
5	SUPPO	RTING PROCESSES	115
	5.1 Co	MMUNICATION	115
		CUMENTATION MANAGEMENT	
		ALITY MANAGEMENT	
	5.3.1	Product Assurance	
	5.3.2	Verification and Validation	
		v	

5.3	Process Assurance	118
5.3.4	Joint Reviews	119
5.	3.4.1 Inspections	119
5.	3.4.2 Walk-Throughs	119
5.	3.4.3 Milestone Reviews	120
5.	3.4.4 Scheduled Reviews	122
5.3.3	Quality Reporting and Metrics	122
5.4	SUBCONTRACTOR MANAGEMENT	122
5.5	PROCESS IMPROVEMENT	123
5.6	FACILITIES	
5.7	HARDWARE AND SOFTWARE	124
5.7.	Purchase	125
5.7.2	TI	126
5.7	Software Maintenance	126
5.7.4	CDSS-APB Hardware and Software	127
	TABLES	
	CONTRACTOR PROJECT DIRECTOR QUALIFICATIONS	
	CONTRACTOR PROJECT MANAGER QUALIFICATIONS	
	CONTRACTOR PROJECT/CONTRACT ADMINISTRATOR QUALIFICATIONS	
	CONTRACTOR TECHNICAL PROJECT MANAGER QUALIFICATIONS	
	CONTRACTOR OPERATIONS MANAGER QUALIFICATIONS	
	CONTRACTOR SYSTEMS IMPLEMENTATION MANAGER QUALIFICATIONS	
	CONTRACTOR TEST MANAGER QUALIFICATIONS	
	CONTRACTOR CUSTOMER SERVICE MANAGER QUALIFICATIONS	
	FUNDING SOURCE MANAGEMENT ANALYST QUALIFICATIONS	
	. SEVERITY RATINGS FOR ISSUES	
	. Test Phases	
	. TEST ROLES AND RESPONSIBILITIES	
_	. DEFECT CORRECTION PERIODS	
	. FACILITY RESPONSIBILITY SUMMARY	
TABLE 15	. EQUIPMENT RESPONSIBILITY SUMMARY	124

#### 1 INTRODUCTION

This Statement of Work (SOW) defines the services required to design, develop, implement, operate, and maintain an automated Case Management Information and Payrolling System (CMIPS II) that supports IHSS/PCSP Program business processes and customer service. The services are categorized by:

- Project Management
- Technical Processes
- Supporting Processes

Project management includes the activities to plan and control the Project scope, schedule, staffing, and budget. The technical processes include the activities to develop, test, implement, operate, and maintain CMIPS II and to assist the IHSS/PCSP Program. The supporting processes include communication, document management, quality management, subcontractor management, process improvement, facilities, and equipment.

#### 2 BACKGROUND

#### 2.1 References

All documents referenced in this Section can be found in Appendix B, Procurement References. Appendix B contains a full listing of all reference documents found in the Bidder's Library in Sacramento. Appendix B also contains hyperlinks to documents available through the Internet.

# 2.2 Project Organization

The Contractor will establish an organization to design, develop, implement, operate, and maintain CMIPS II and support the IHSS/PCSP Program. The Contractor will closely coordinate with the HHSDC who is providing the CMIPS II infrastructure. The Contractor will also interact with the Federal, State, and county offices who administer the IHSS/PCSP Program, control agencies who provide oversight, advisory/advocate groups who represent special interests, and agencies that interface with the system. The following paragraphs provide a broad overview of the roles of these organizations.

# 2.2.1 California Department of Social Services (CDSS) Adult Programs Branch (APB)

The CDSS APB is the Project sponsor and is responsible for the success of the IHSS/PCSP Program and its supporting systems, Legacy CMIPS System and CMIPS II. CDSS APB is responsible for the policies, rules, regulations, and requirements as they apply to the IHSS/PCSP Program. CDSS provides funding and oversight for the CMIPS II procurement Project. CDSS also provides IHSS/PCSP subject matter expertise for defining business requirements and participating in user acceptance testing. CDSS APB will review and has approval authority for the proposed CMIPS II system and any changes.

# 2.2.2 Health and Human Services Agency Data Center (HHSDC)

# 2.2.2.1 CMIPS Project Office

At the request of the Project sponsor, the HHSDC CMIPS Project Office is responsible for managing the activities in support of the CMIPS II procurement.

The Project Office provides project management and oversight including status reporting, assessing and mitigating risk, facilitating communications and teamwork among stakeholders, resolving issues, and managing resources. The Project Office oversees activities associated with the CMIPS II system design, development, implementation, operation, and maintenance. The Project Office verifies and validates Contractor processes and deliverables. The Project Office also monitors and reports the development and implementation status of external partners to include county offices, HHSDC, and interface entities.

#### 2.2.2.2 HHSDC Services

HHSDC will establish and, in coordination with the Contractor, maintain the infrastructure for the CMIPS II while the Contractor will be responsible for operating and maintaining the CMIPS II application and associated toolsets. The HHSDC infrastructure shall include production and compatibility testing systems. If there is a conflict or discrepancy between the RFP Section 6 Statement of Work and the Appendix C - Data Center Statement of Work the RFP Section 6 Statement of Work takes precedence.

Data Center Services shall meet the specific requirements of Appendix C - Data Center Statement of Work (DC SOW). The major HHSDC responsibilities include:

- 1. Support project planning
  - a. Prepare HHSDC Plans to include:
    - i) Data Center Master Plan
    - ii) Data Center Operations Plan
    - iii) Data Center System Test Plan
    - iv) Data Center System Security Plan
    - v) Data Center Subcontractor Management Plan
  - b. Support Contractor planning that includes:
    - i) Capacity Management Plan
    - ii) Data Distribution Plan
    - iii) Backup and Recovery Plan
    - iv) Disaster Recovery Plan
    - v) Customer Service Plan to include Help Desk support.
- 2. Review the Contractor infrastructure design and plans.
- 3. Support the implementation of the HHSDC infrastructure design
  - a. Contractor will purchase equipment and software

- b. Contractor will install and test the equipment and software. If required, Contractor will use a subcontractor certified to install the equipment.
- c. Contractor will test the installed equipment and software
- d. HHSDC will accept the installed and tested equipment and software
- e. Contractor will transfer ownership to HHSDC
- 4. Support the Contractor in statewide implementation.
- 5. Operate and monitor HHSDC infrastructure according to approved plans to include:
  - a. Configuring and managing core operating system, database management systems, and data storage systems
  - b. Backup and recovery of all system and data files on the system(s)
  - c. Maintenance of system security including all privileged accounts on the system(s)
  - d. Maintenance and operation of system environment including but not limited to power supplies, temperature control and physical security
  - e. Execute the HHSDC responsibilities of the Disaster Recovery Plan.
- 6. Operate and monitor HHSDC WAN according to approved plans to include
  - a. Establishing connectivity to the HHSDC WAN
  - b. Monitoring and managing the HHSDC WAN
  - c. Supporting access services including the ability to access HHSDC from a dial-up connection or over a secure Internet connection.
- 7. Physical Security.
- 8. Change Management.
- 9. Customer Service.

The Contractor is responsible for overall project schedule and system availability that includes the infrastructure solution implemented and maintained by HHSDC and, as such, will work closely with HHSDC to ensure the schedule and availability meet requirements. Concise and detailed division of responsibilities shall be defined in the Project Master Plan, Capacity Management Plan, and Operations Plan.

# 2.2.3 System Users

The primary users of CMIPS II are IHSS/PCSP staff located in the County Welfare Departments, CDSS APB, and the Public Authorities. In addition, DHS has a small number of staff who will use CMIPS II for the administration of the Medi-Cal Personal Care Services Waiver Program. A detailed list of system users and their roles is included in Section 6, TECHNICAL REQUIREMENTS – System Requirements Specification (SyRS), hereinafter referred to as Section 6, SyRS.

#### 2.2.4 Customers

The recipients and providers are the IHSS/PCSP Program customers. The recipient is the employer of record for the purposes of hiring the provider and managing their daily schedule. The provider is responsible for performing the authorized services.

# 2.2.5 Control Agencies

Control agencies have approval authority for Project funding and work product deliverables. They also monitor projects to ensure they adhere to standards.

# 2.2.5.1 Department of General Services (DGS)

DGS is responsible for conducting the procurement of the CMIPS Project. DGS, with the HHSDC CMIPS Project Office, develops the RFP and Contract. DGS has final State authority to administer the procurement, resolve procurements issues and approve the RFP and the Contract, including any amendments to these documents.

# 2.2.5.2 California Health and Human Services Agency (CHHSA)

CHHSA is responsible for California's health and social services programs and reviews contract documents. In addition, the agency is responsible for the oversight of the management of ongoing information technology projects and procurements within the agency's jurisdiction to ensure they are on course, on time, and on budget. The agency is responsible for initiating information technology projects consistent with both statewide and department strategic plans.

# 2.2.5.3 Department of Finance (DOF)

DOF has authority to approve the annual funding for the Project and the associated documents, to include the Budget Change Proposals (BCPs) and the Implementation Advanced Planning Document (IAPD)/Feasibility Study Report (FSR). DOF also contains the Technology Oversight System Unit (TOSU) that provides project oversight according to the Information Technology Project Oversight Framework.

# 2.2.5.4 California Legislature and Governor

The California Legislature has sole authority to provide for funding through the annual budget bill or through specific legislation. The Governor has the final authority to approve the budget bill or specific legislation. The Legislature has authority to create legislation that affects the IHSS/PCSP Program and the CMIPS Project.

# 2.2.5.5 Department of Health Services (DHS)

DHS is the single State agency for California Medicaid Program and is responsible for reviewing the CMIPS Project budgets and Contracts before they are sent to Centers for Medicare and Medicaid Services for approval.

# 2.2.5.6 Centers for Medicare and Medicaid Services (CMS)

CMS is a Federal agency responsible for Title XIX Program administration and funding. Because of Federal funding and the CMIPS II interfaces with DHS, following the State Department of Health Services review, CMS will review and has authority to approve Federal funding and financial participation (FFP) for a portion of the Project costs and system

specifications that are under the purview of CMS. As such, CMS will review and has authority to approve various documents, including but not limited to, the Project budget and Contract.

# 2.2.6 Advisory and Advocate Groups

#### 2.2.6.1 California Welfare Directors Association (CWDA)

The California Welfare Directors Association (CWDA) represents county welfare directors and their designees. CWDA monitors the CMIPS Project and reviews the CMIPS II business requirements through two committees: CWDA Information Technology (IT) committee and the Long Term Care Operations Committee.

#### 2.2.6.2 California Association of Public Authorities (CAPA)

The California Association of Public Authorities (CAPA) represents the county Public Authorities for the IHSS/PCSP Program. CAPA monitors the CMIPS Project and reviews the CMIPS II business requirements as needed.

# 2.2.6.3 California State Association of Counties (CSAC)

CSAC represents county government before the California Legislature, administrative agencies and the Federal government. CSAC monitors the CMIPS Project and resolves issues that concern their organization.

# 2.2.6.4 IHSS Advisory Committees

Chapter 90, Statutes of 1999 (AB 1682) requires each county to appoint a committee of IHSS Program Recipients, Individual Providers, and advocates. Counties and county organizations engaged in the delivery or management of the IHSS/PCSP Program are required to solicit the advice of IHSS advisory committees in their deliberations. These committees may assist in resolving program issues.

# 2.2.6.5 Labor Organizations

There are labor organizations representing State, county, and Individual Providers. Service Employees International Union (SEIU) and United Domestic Workers (UDW) represent home care workers. The California State Employees Association (CSEA) represents the interests of civil service employees working for the State of California. American Federation of State, County, and Municipal Employees (AFSCME) represents the interests of the public service and health care workers.

# 2.2.7 Interface Agencies

CMIPS II shares data with other agencies. Each agency has authority to set interface standards for their systems. These agencies will report any changes in interface requirements to the Project Office. Section 6, SyRS, has a detailed list of interface agencies.

# 2.3 Project Constraints

- 1. System documentation for the Legacy CMIPS System is limited. Some system documentation is only available through the Coolgen tool. The Contractor may have to analyze the Legacy CMIPS System code to fully define the business rules that will be automated in CMIPS II.
- 2. The Contractor is required, in the design, development, implementation, operation, and maintenance of CMIPS II, to comply with and ensure that the CMIPS II system complies with all laws. The State will provide expertise as to the legal, as well as program and operational requirements of the IHSS/PCSP Program. The Contractor shall provide expertise regarding all other legal requirements. The legal citations and references provided in this document are believed to be accurate. However, no representation is made that the legal information provided is in fact complete and accurate and the Contractor shall independently determine, validate, and implement all legal requirements necessary for the lawful operation of CMIPS II.
- 3. The Contractor shall have processes and deliverables that meet the requirements of the IEEE standards defined in this SOW. The Contractor shall tailor the plans and deliverables according to the IEEE tailoring guides. In the interest of cost reduction and quality improvement, the Contractor will identify only processes and standards that are relevant and applicable for the Project that depend on their selected life cycle model and technical solution. The Contractor may recommend exceptions to this standard. However, there shall be no exceptions unless specifically approved in writing by the State Project Manager or his/her designee.

The IEEE standards are not intended to be in conflict with any organization's policies, standards, or procedures that are already in place. However, any conflict needs to be resolved and any overriding conditions and situations need to be cited as exceptions to the application of the standards and submitted in writing to the State Project Manager for approval.

If the Contractor has processes established that meet IEEE standards but use different terminology; however, with approval by the State Project Manager or his/her designee, the Contractor might use its terminology and provide the State Project Manager with a cross-reference between its terms/processes and the IEEE terms/processes. A cross-reference of State terminology used in this SOW to IEEE terminology is provided in Exhibit 6 SOW-1, IEEE Tailoring for State Terminology.

#### 3 PROJECT MANAGEMENT

The Contractor is responsible for successfully planning and executing the managerial, technical, and supporting processes of this Contract.

For planning purposes, the project is divided into two major parts: Design, Development, and Implementation (DDI); and Maintenance and Operation (M&O). DDI starts at Contract award and ends with the State acceptance of statewide CMIPS II operation. The M&O phase starts when the last county is successfully implemented. While M&O activities will start when the first county is implemented these activities shall be included in the DDI phase of project.

- 1. For DDI, the Project will be managed in fixed-price sub-phases with distinct milestones, end products, and approval points for each phase. The DDI phases will include project planning/initiation, requirements validation, design, test, and implementation as defined by IEEE 12207-1996, Standard for Information Technology Software Life Cycle Processes. The CMIPS Project Office will conduct milestone reviews with predefined acceptance criteria to approve the completion of the milestone and the initiation of a new phase as explained in Paragraph 5.3.4.3, Milestone Reviews. The progress of the DDI phase and each sub-phase will be tracked using an Earned Value methodology as explained in Paragraph 3.2.1.1, Tracking DDI Activities.
- 2. For the Maintenance portion of M&O, the CMIPS Project Office establishes an annual contract appropriation ceiling for system maintenance and enhancements. The system updates will be grouped into scheduled Maintenance Releases as explained in Paragraph 4.3.5, Release Management. The Contractor will plan each change as a fixed-price effort and track by Maintenance Release with sub-phases as needed for planning/initiation, requirements validation, design, test, and implementation that meet the same IEEE standards as the initial DDI. The progress of each phase and total maintenance cost will be tracked using an Earned Value methodology. The cost of all the changes each year will not exceed the annual appropriation ceiling. Defect correction is not part of the annual budget for system maintenance and enhancements; Contractor shall correct all defects at the Contractor's expense. The annual appropriation may be adjusted to accommodate additional business requirements as described in Paragraph 3.2.5, Change Management.
- 3. The Operations portion of M&O includes both fixed-price and fixed-rate work. The fixed-price portion is for predictable, level-of-effort for work that is general or supportive in nature with periodic deliverables to include project management, system administration, program support and other supporting processes as explained in Paragraph 1, Tracking Fixed Price Operations Activities. The fixed-price Operations will be planned annually according to the State fiscal calendar and tracked monthly. The fixed-rate portion of the Operations is for services and equipment that are dependent on the volume of use to include Training, WAN Services, Data Center Services, and Payroll Services as explained in Paragraph 3.2.1.4, Tracking Fixed-Rate Operations Activities. Fixed-Rate work will also be planned annually according to the State fiscal calendar and tracked monthly.

# 3.1 Project Planning

Project planning is accomplished throughout the project life cycle. Plans are created in an iterative process where they start out at a high level and then as the Project evolves, the nature of the work to be done is better understood and plans become more detailed. Thus, each plan is a living document and will be updated as needed.

- 1. Every plan shall have a schedule for subsequent updates and contain a change history.
- 2. Every plan shall be updated to reflect current project and system requirements.
- 3. Each plan shall be placed under configuration management.

# 3.1.1 Project Master Plan (PMP)

- 1. The Contractor shall develop, deliver, maintain, and execute a Project Master Plan (PMP). The Project Master Plan shall meet the requirements of IEEE 1058-1998, Standard for Software Project Management Plans; IEEE 12207, Paragraph 7.1, Management Process; and Project Management Body of Knowledge (PMBOK) Chapter 4.1, Project Plan Development. The PMP shall have the content and format described in IEEE 1058-1998 but tailored to include System Design, Development, Implementation, Maintenance, and Operations and IHSS/PCSP Program Support in the Technical Processes as described in this SOW.
- 2. The Contractor shall supplement the Project Master Plan with the following detailed plans:
  - a. Master Work Plan (Paragraph 3.1.2)
  - b. Project Staffing Plan (Paragraph 3.2.2.1)
  - c. System Development Plan (Paragraph 4.1.1)
  - d. Test and Evaluation Master Plan (Paragraph 4.2.2) further supplemented by:
    - i) System Test Plan (Paragraph 4.2.2)
    - ii) Pilot Operation Plan (Paragraph 4.5.6)
  - e. Statewide Implementation Plan (Paragraph 4.5.2) further supplemented by:
    - i) Data Cleanup Plan (Paragraph 4.5.4.1)
    - ii) Data Conversion Plan (Paragraph 4.5.4.2)
    - iii) Business Change Management Plan (Paragraph 4.5.3.1)
    - iv) Training Plan (Paragraph 4.5.4.4.1)
  - f. Project Maintenance Plan (Paragraph 4.3.2) further supplemented by:
    - i) Release Management Plan (Paragraph 4.3.5.1)
  - g. Operations Plan (Paragraph 4.4.1) further supplemented by:
    - i) Business Services Migration Plan (Paragraph 4.5.9)
    - ii) Capacity Management Plan (Paragraph 4.4.3)
    - iii) System Security Plan (Paragraph 4.4.5)
    - iv) Backup and Recovery Plan (Paragraph 4.4.6)
    - v) Disaster Recovery Plan (Paragraph 4.4.8)
  - h. Project Communication Plan (Paragraph 5.1)
  - i. Change Management Plan (Paragraph 3.2.5)
  - j. Configuration Management Plan (Paragraph 3.2.6)
  - k. Risk Management Plan (Paragraph 3.2.7)
  - 1. Quality Assurance Plan (Paragraph 5.3.1, Product Assurance) to be further supplemented by:
    - i) Verification and Validation Plan (Paragraph 5.3.2)
    - ii) Process Assurance Plan (Paragraph 5.3.3)
  - m. Metrics Plan (Paragraph 3.2.8)
  - n. Document Management Plan (Paragraph 5.2)
  - o. Subcontractor Management Plan, if applicable (Paragraph 5.4)

- p. Issue Management Plan (Paragraph 3.2.4)
- q. Corrective Action Plan, as needed (Paragraph 3.2.10)
- r. Process Improvement Plan (Paragraph 5.5)
- s. Project Closeout Plan (Paragraph 3.4).

#### 3.1.2 Master Work Plan

Project activities will be planned and managed using a Master Work Plan based on a Work Breakdown Structure (WBS) that breaks the work scope into appropriate elements for Earned Value tracking. The extent of detail (breakout and levels) in the WBS will be determined by level of control required to meet contract requirements as determined by the State Project Manager. The Master Work Plan and WBS will be developed in an iterative fashion where more detail is added as the Project progresses.

- 1. The Contactor shall develop, deliver, maintain, and execute a Master Work Plan and related work plans that include:
  - a. Tasks and subtasks, including dependency tasks to the level it will be managed by the Contractor.
  - b. Milestones and milestone reviews
  - c. All contract deliverables
  - d. Resource loading number, level, and type of staff summarized for each task and subtask to the level it will be managed
  - e. Estimated effort for each task at the level it will be managed
  - f. Gantt chart showing planned and actual start and end dates for tasks and percentage complete to the level it is being managed
  - g. Identification of critical path activities
  - h. Time period for State review and comment for deliverables and milestones, and subsequent time period for Contractor correction.
- 2. The Master Work Plan shall be based on a WBS as described in PMBOK Chapter 4.1, Project Plan Development, Chapter 5.3, Scope Definition, and Chapter 6, Time Management. The WBS is defined in PMBOK Paragraph 5.3.3.1, Outputs from Scope Definition.
- 3. The Master Work Plan and WBS shall be a direct representation of the work and product scope defined in this SOW and the System Requirements Specification. The Master Work Plan shall identify activities and expected durations that the Contractor expects to be completed by the Contractor, State, county, or Incumbent Contractor staff in order to meet the estimated schedule.
- 4. The Contractor shall baseline the Master Work Plan with the final proposal. Any changes to the baselined Work Plan must have the State Project Manager's written approval. The baselined Master Work Plan shall be used for project tracking and control as described in Paragraph 3.2.1, Schedule and Budget Management.
- 5. The Master Work Plan shall be maintained and updated for the life of the Contract by the Contractor. The Contractor shall not change the high-level (minimum of three-tier) Master

Work Plan and milestone schedule unless they have the State Project Manager's written approval. The Contractor shall submit a written request the State Project Manager to change the high-level work plan and milestone schedule to include a description of the change with supporting documentation for the justification and impact analysis as defined in Paragraph 3.2.5, Change Management.

- 6. The Contractor shall develop, deliver, maintain, and execute a Work Plan Update (WPU) detailing the tasks for each phase to be delivered prior to each phase in the life cycle to include, but are not limited to:
  - a. Project Initiation WPU (Paragraph 3.3)
  - b. Project Closeout WPU (Paragraph 3.4)
  - c. During the DDI phase, supplemental work plans shall include:
    - (1) System Requirement Validation WPU (Paragraph 4.1.1, System Development Planning)
    - (2) General System Design WPU (Paragraph 4.1.1)
    - (3) Detailed System Design WPU (Paragraph 4.1.1)
    - (4) Coding and Documentation WPU (Paragraph 4.1.1)
    - (5) System Test WPU (Paragraph 4.2.2, Test Planning and Deliverables)
    - (6) Statewide Implementation WPU (Paragraph 4.5.2, Statewide Implementation Planning)
    - (7) Quality Assurance WPU (Paragraph 5.3.1, Product Assurance)
  - d. During M&O phase, supplemental work plans shall include a Release Management WPU for each Maintenance Release (Paragraph 4.3.5.1, Project Maintenance Planning).
- 7. As a general rule, total resource unit estimates by skill category for a phase work plan update should not exceed one hundred sixty (160) staff hours and the total duration of any single work plan activity should not exceed four (4) weeks.
- 8. The phase work plan update shall be submitted by the Contractor as part of the milestone review for the previous phase. The Contractor shall have written approval from the State Project Manager prior to starting the work in the work plan update.
- 9. For level-of-effort activities, the Contractor shall refine and update the Master Work Plan and WBS only as needed.

#### 3.1.3 Schedule

- 1. The Project Master Plan shall include a milestone schedule summary based on the Master Work Plan. The milestone schedule summary shall be baselined with the Final Proposal. Any changes to that the baselined Project Master Plan must have the State's written approval.
- 2. After contract award, the Contractor shall maintain and update the milestone schedule summary for the Project Master Plan in the Monthly Project Status Report as defined in Paragraph 3.2.8, Project Metrics. The Contractor shall control changes to the schedule according to Paragraph 3.2.5, Change Management.

#### 3.1.4 Budget Planning

- 1. As part of the Project Master Plan, the Contractor shall specify methods, tools, techniques and assumptions used to estimate the contract budget and associated confidence levels. The basis of estimation shall be specified to include techniques such as analogy, rule of thumb, or local history and the sources of data. The Bidder shall also specify the methods, tools, assumptions, and techniques that will be used to periodically re-estimate the cost needed to complete the project.
- 2. As part of the Project Master Plan, the Contractor shall develop and maintain project cost estimate methodology to include identification of supporting data for each cost category in accordance with the DOF Information Technology Project Oversight Framework.
- 3. The Contractor shall submit budget planning information to help the CMIPS Project Office prepare Advanced Planning Documents and Budget Change Requests and shall submit Project Budget Estimates to support the State budget process and Federal funding approval process.

#### 3.2 Control Processes

The purpose of the control processes is to monitor, control, and report on the project scope, activities, expenditures, resources, issues, and risks to ensure the Contractor meets the Project budget, schedule, and business objectives.

1. The Contractor shall provide at least three staff from the CMIPS Project Office and three staff from CDSS Adult Program Branch access from their desktop computers to automated tools and data utilized for managing the project, including schedule, issues, risks, and change requests.

# 3.2.1 Schedule and Budget Management

For tracking purposes, the project will be divided into two major phases: Design, Development, and Implementation (DDI) and Maintenance and Operation (M&O).

- 1. The Contractor shall monitor and control project activities and expenditures to keep the Project within the planned schedule and contract budget using Earned Value methodology as defined by the Project Management Institute (PMI) PMBOK. Using Earned Value methods, the Contractor will:
  - a. Plan all work scope for the Project to completion
  - b. Integrate project work scope, schedule, and cost objectives into a baseline plan against which accomplishments may be measured
  - c. Objectively assess accomplishments at the work performance level
  - d. Analyze significant variances from the plan and forecast impacts
  - e. Provide data for management decision-making and implementation of management actions.
- 2. The Contractor shall record actual hours expended at least weekly in Project Management software in accordance with the DOF Information Technology Project Oversight Framework.

3. The Contractor shall record estimated hours to complete by task at least monthly in Project Management software in accordance with the DOF Information Technology Project Oversight Framework.

## 3.2.1.1 Tracking DDI Activities

- 1. All the costs in the DDI are fixed and shall be tracked in the following phases. The Contractor shall treat each phase as a subproject with its own Earned Value metrics. The successful completion of each phase will be determined at a joint review conducted at the end of each phase as described in Paragraph 5.3.4.3, Milestone Reviews.
  - a. Project Initiation Phase measured by the Project Initiation Review
  - b. System Requirements Validation Phase measured by the System Requirements Validation Review
  - c. General System Design Phase measured by the General System Design Review
  - d. Detailed Design Phase measured by the Detailed System Design Review
  - e. Coding and Documentation Phase measured by the Coding and Documentation Review
  - f. Integration Test Phase measured by the Integration Test Review
  - g. Functional Test Phase measured by the Review Functional Test Review
  - h. User Acceptance Test Phase measured by the User Acceptance Test Review
  - i. Release Readiness Phase measured by the Release Readiness Review
  - j. Pilot Operation Phase measured by the Pilot Operation Review
  - k. Statewide Implementation Phase measured by the Post Statewide Implementation Review that includes subtotals for:
    - i) Training
    - ii) Data Cleanup measured by the Data Cleanup Review
    - iii) Data Conversion measured by the Data Conversion Review
    - iv) Site Preparation Phase measured by the Site Readiness Report Review
    - v) Site Deployment Phase measured by the Post Site Implementation Reviews (determine cost per site and county)
    - vi) Statewide Operation Phase prior to final acceptance measured by the Post Statewide Implementation Review
- 2. Prior to each phase, the Contractor shall establish a target baseline value, e.g., budget and effort, for each scheduled element of work in a Work Plan Update to the level it will be managed as described in Paragraph 3.1, Project Planning and subparagraphs. As these elements are worked on and completed, the Contractor shall calculate their "earned" target value based on percent complete for the task at least weekly. As such, work progress is quantified and the Earned Value becomes a metric against which to measure both what was spent to perform the work and what was scheduled to have been accomplished.

# 3.2.1.2 Tracking Maintenance Activities

The System Maintenance and Enhancement portion of the M&O phase described in Paragraph 4.3, will be tracked with Earned Value metrics where each Maintenance Release will be considered a "mini DDI phase". The CMIPS Project Office will establish an annual budget for the System Maintenance and Enhancement function. If a new requirement results in a system modification that is beyond the scope of the base-level contract appropriation, the State may issue a Contract Amendment to increase the annual contract appropriation.

- 1. The Contractor shall estimate the cost of each change and receive State approval through a Work Authorization prior to beginning work.
- 2. The Contractor shall then track the actual cost of that enhancement and the cumulative cost of all enhancements for the year and compare to the annual maintenance contract appropriation to ensure the annual appropriation is not exceeded.
- 3. The State Configuration Control Board (CCB) will group enhancements into Maintenance Releases and the Contractor shall track the Earned Value metrics for each Maintenance Release. For large, complex Maintenance Releases the Contractor shall further divide and track the Release in sub-phases for requirements validation, design, code, test, and implementation similar to the initial system development.

#### 3.2.1.3 Tracking Fixed-Price Operations Activities

A majority of the activities during the Operations portion of the M&O phase are level-of-effort with a fixed cost per year. For level-of-effort activities, the Earned Value is earned by the passage of time and is equal to the budget scheduled in each time period and, therefore, can be tracked simply by comparing budget to actual cost. Fixed-Price Operations activities include:

- 1. Project Management (Paragraph 3)
  - a. Project Planning (Paragraph 3.1)
  - b. Control Processes (Paragraph 3.2)
- 2. System Administration (Paragraph 4.4)
  - a. System Operation Planning (Paragraph 4.4.1)
  - b. Capacity Planning and Management (Paragraph 4.4.3)
  - c. Operations Management (Paragraph 4.4.4)
  - d. System Security (Paragraph 4.4.5)
  - e. Backup and Recovery (Paragraph 4.4.6)
  - f. Data Archive (Paragraph 4.4.7)
  - g. Disaster Recovery (Paragraph 4.4.8)
  - h. Customer Service (Paragraph 4.4.9) at base level
  - i. System Administration Reporting and Metrics (Paragraph 4.4.10)
- 3. Program Support (Paragraph 4.6) to include:
  - a. Case Management Services (Paragraph 4.6.2)
  - b. Payroll Processing Services (Paragraph 4.6.3) to include:

- i) Daily Processing (Paragraph 4.6.3.1)
- ii) Taxes (Paragraph 4.6.3.2)
- iii) W2 Processing (Paragraph 4.6.3.3)
- iv) Warrant Problem Management (Paragraph 4.6.3.6)
- c. Program Integrity Services (Paragraph 4.6.4)
- d. Funding Source Management (Paragraph 4.6.5)
- e. Website Management (Paragraph 4.6.6)
- f. Forms Support (Paragraph 4.6.7)
- g. Reporting Support (Paragraph 4.6.8)
- h. Project Service Requests (Paragraph 4.6.9)
- i. Program Support Reporting and Metrics (Paragraph 4.6.12)
- 4. Supporting Processes (Paragraph 5)
  - a. Communication (Paragraph 5.1)
  - b. Document Management (Paragraph 5.2)
  - c. Quality Management (Paragraph 5.3)
  - d. Subcontractor Management (Paragraph 5.4)
  - e. Process Improvement (Paragraph 5.5)
  - f. Facilities (Paragraph 5.6)
  - g. Hardware and Software (Paragraph 5.7)

The Contractor shall track these level-of-effort, Fixed-Price activities by comparing budget to actual effort where resource requirements are represented by a time-phased budget scheduled in accordance with the time the support will likely be needed.

# 3.2.1.4 Tracking Fixed-Rate Operations Activities

The Contractor will provide fixed-rates per year for services or equipment that are dependent on the volume of use. For budgeting purposes, the Contactor shall provide cost estimates per year for ongoing annual costs in the following categories based on estimated usage.

- 1. Training (Paragraph 4.5.4.4) per student per course
- 2. Payroll Processing Services (Paragraph 4.6.3) to include but not limited to:
  - i) Withholding Management (Paragraph 4.6.3.4)
  - ii) Liens (Paragraph 4.6.3.5) based on lien volume
  - iii) Timesheet Processing (Paragraph 4.6.3.7) based on timesheet volume

For these Fixed Rate activities, the Earned Value is earned with the use of the service and can be tracked simply by comparing budget to actual effort. The Contractor shall track Fixed-Rate activities by comparing budget to actual effort as above where resource requirements are represented by a usage-based budget. The State, with the Contactor's assistance, will evaluate and update usage estimates as required.

#### 3.2.1.5 Schedule and Budget Metrics

As part of the Monthly Project Status Report, the Contractor shall report the following project metrics:

- 1. The Contractor shall calculate and report the Schedule Variance for each major cost category and total project cost at least monthly by comparing the contract budget to the earned value to determine and quantify the schedule performance (Earned Value minus Estimated Budget) for the Project.
- 2. The Contractor shall calculate and report the Schedule Performance Index (SPI), the ratio of Budget Cost of Work Performed (BCWP) and Budgeted Cost of Work Scheduled (BCWS) for the total Project and each active phase to the level it will be managed at least once a month. An SPI between 0.9 and 1.2 shall require no action. An SPI between 0.8 to 0.89 or 1.21 to 1.3 shall require an explanation of reason and corrective action in the Monthly Project Status Report. An SPI above 1.3 or below 0.8 shall require a Corrective Action Plan, as defined in Paragraph 3.2.10, Corrective Action Plan (CAP) and Liquidated Damages. If the SPI falls below 0.6, the Contractor shall brief HHSDC and CDSS Executive Management and the Project may be a candidate for cancellation.
- 3. The Contractor shall calculate and report Cost Variance for each major cost category and total project cost by comparing the actual cost and the earned value for the same work scope (Earned Value minus Actual Cost). The cost variance is a measure of cost performance as it compares the actual cost incurred to the value of work accomplished and will eliminate the effects of schedule status variations that are inherently present in a simple comparison of actual cost to a contract budget. A positive cost variance value indicates a favorable position and a negative value indicates an unfavorable condition.
- 4. During the DDI phase, the Contractor shall perform a Critical Path Analysis for each major project phase for long-range projections as part of the milestone review for the previous phase. Once a phase is started, the critical path for that phase shall be recalculated at least monthly.
- 5. For the DDI phase and each sub phase, the Contractor shall determine the current estimated total cost for Project-authorized work as the Estimate at Completion (EAC) that equals actual cost to a point in time plus the estimated costs to completion (Estimate To Complete). EAC shall be calculated for the entire Project and current project phases and be reported at least monthly to the State Project Manager. The Contractor shall compare this information with the performance measurement baseline approved by the CMIPS Project Office to identify variances at completion that impact the Project and any applicable stakeholder.
- 6. The Contractor shall deliver supporting effort data if requested by the CMIPS Project Manager within two (2) business days of the request.

# 3.2.2 Staffing Management

The Contractor is responsible for maintaining an appropriate staffing mix and staffing levels for the duration of the Contract to meet the requirements of this Contract.

#### 3.2.2.1 Project Staffing Plan

- 1. The Contractor shall develop, deliver, maintain, and execute a Project Staffing Plan, in accordance with PMBOK Chapter 7.1, Resource Planning and Chapter 9.1, Organizational Planning, based on the WBS and Master Work Plan and submit this to the State Project Manager.
- 2. The Project Staffing Plan shall present the Contractor's staff resources necessary to meet the needs of the Project, including total number of full-time equivalent staff in the various positions proposed as well as expected roles, responsibilities, tasking for each position, start dates and end dates. A matrix of major work activities and supporting processes versus organizational units may be used to depict Project roles and responsibilities. The plan shall also include any assumptions used for effort and staff estimating.
- 3. The Project Staffing Plan shall also describe how staff will be organized and managed in accordance with PMBOK 9.1.3.2, Staffing Management Plan. This section shall include an organization chart that shows all Contractor staff positions, task assignments, and the proposed lines of authority and communication within the Contractor's team. In addressing this area, the Contractor shall identify the corporate officer(s) to be contacted in the event that major problems arise during the performance of the Contract. It shall also describe how the Contractor's team will interact with State personnel.
- 4. The Project Staffing Plan shall include estimates for the effort required for county subject matter experts (SME) to support the requirements definition, joint design sessions, data cleanup, data conversion, site preparation, testing, and implementation for DDI and M&O phases. The Contractor shall identify the subject matter expertise required and estimate the effort in hours for event. The State and county SME participation in these tasks shall not exceed 16,000 person hours per annum during DDI and 2,000 person hours per annum during M&O. The Contractor shall also provide total estimated hours for the DDI and M&O phases.
- 5. The Contractor shall include estimates for any State Project office resources. For Planning purposes, State Project Office will have twenty-one (21) Full-Time Equivalents (FTE) that will be available for fifteen (15) percent of their time to support the Contractor.
- 6. The Project Staffing Plan shall include a Division of Responsibilities Matrix that clearly identifies which party, Contractor, or HHSDC is responsible for project and system components. An example of this matrix can be found in Exhibit 6 SOW-2, Division of Responsibilities Matrix. The matrix shall contain responsibilities for each system required in the solution.
- 7. The Project Staffing Plan shall include estimates for the State, county, Incumbent Contractor staff or other resources required to support the Contract activities to include the staff category and estimated hours.
- 8. The Contractor shall maintain and update the Project Staffing Plan for the duration of the Contract.
- 9. This Project Staffing Plan shall be consistent with the Master Work Plan (Paragraph 3.1.2) and the WBS.

- 10. The Contractor shall report the metrics for proposed versus actual staffing levels and Staff turnover to the State Project Manager monthly.
- 11. The Contractor shall report any staffing changes and shortages in the Monthly Project Status Report.

#### 3.2.2.2 Staff Changes

- 1. The Contractor shall not reassign Project Team members while in the employment of the Contractor if such reassignment will conflict with the work the individual is to perform on this Project, as determined by the State Project Manager. The State recognizes that resignation or other events may cause a Project Team member to no longer be available to the Contractor. If this occurs, Contractor shall notify in writing the State Project Manager or his/her designee of the resignation within five (5) business days. The State Project Manager reserves the right to approve all staff, including replacement staff, assigned by the Contractor to the Project. Any replacement personnel during the life of the Contract shall meet or exceed the skill level of their predecessor.
- 2. In addition, the State Project Manager reserves the right to disapprove the continuing assignment of any Contractor or Subcontractor personnel provided to the State under this Contract. The State Project Manager will provide written notice to the Contractor Project Manager at least twenty (20) business days before personnel are to be replaced. The Contractor or Subcontractor will be given a reasonable period of time (not to exceed fifteen [15] business days) to present to the State CMIPS Project Office at least one qualified resume of replacement personnel for potential State CMIPS Project Office approval.

# 3.2.2.3 Key Staff

- 1. All Key Staff replacements or additions shall require prior approval from the State. The State CMIPS Project Office may, at its discretion check references of proposed staff and may interview proposed staff.
- 2. Each project staff position listed below is considered Key Staff and includes a description of the responsibilities, duties, and minimum experience required of that position. In addition, all Key Staff shall have good written and verbal communication skills as determined by a State panel through an interview and evaluation of a writing sample. For each position, the Key Staff shall have, as a minimum requirement, experience in the general areas of responsibility listed for that position.
- 3. The Contractor shall submit resumes for all Key Staff, except the Contractor Operations Manager and the Contractor Customer Service Manager with the Final Proposal. All resumes shall be in a consistent format. If not currently employed by the Contractor, copies of letters offering and accepting employment shall be included with the response. The Contractor may designate this information as confidential.
- 4. The Contractor shall identify the names and submit a Resume Summary Form (Exhibit 9.4, Resume Summary Form) for each proposed staff member, except the Contractor Operations Manager and the Contractor Customer Service Manager detailing how the proposed Key Staff meet the minimum and desirable requirements. The Resume Summary Form must also

include client references for all of the proposed Contractor Key Staff for all projects for at least the past three (3) years. The Key Staff experience may be validated by the State CMIPS Project Office through reference checks. The Key Staff specified in the Contractor's Final Proposal shall be the same Key Staff who will carry out the work of the Contract unless otherwise approved by the State as described above.

#### 3.2.2.3.1 Contractor Project Director

The Contractor Project Director is responsible for ensuring that the Project receives corporate support, commitment, and oversight to meet all its contractual requirements. The Contractor Project Director has signature authority to commit the Contractor to all contractual agreements with the State for this project. The Contractor Project Director provides direction to the Project effort, ensures that all contractor supplied staff needs and other resources for the Project are met as required, and maintains accountability for contractor supplied staff performance. The Contractor Project Director is responsible for managing contractual relationships, administering agreements, administering and ensuring resource availability, managing communications for reporting, Issue Management with Contractor executive staff, and managing fiscal reporting.

**EXPERIENCE** MINIMUM DESIRED Project Management Experience 5 Years 10 Years Project Management of large (at least \$30 million contract value) 2 Years 5 Years system integration project(s) Postgraduate degree in Business Management or Technical degree N/A Yes related to proposed solution 2 years experience directing a project that adhered to IEEE 12207 N/A Yes Standards for Software Lifecycle Processes Experience managing a project with Software Engineering Institute N/A Yes (SEI) Capability Maturity Model (CMM) Level 3 or higher certification Experience managing a system integration project for a Payroll N/A Yes system

**Table 1. Contractor Project Director Qualifications** 

## 3.2.2.3.2 Contractor Project Manager

The Contractor Project Manager will be responsible for the day-to-day management of the Project including overall performance and Contract compliance. The Contractor Project Manager will report directly to the Contractor Project Director and will be responsible for managing and coordinating the Contractor resources assigned to the Project, and ensuring that all tasks in the Master Work Plan are executed in keeping with the schedules and State requirements. The Contractor Project Manager responsibilities will include:

 Providing day-to-day management and direction of Contractor resources assigned to the Project

- Managing the Project to the current work plans and coordinating the availability of scheduled resources to the Project
- Managing all Project resources and ensuring that appropriate resources are available throughout the life of the contract
- Establishing and maintaining regular communications with the CMIPS Project Office and counties
- Providing written status reports as required
- Maintaining issue reporting, tracking, escalation, and resolution procedures
- Conducting ongoing reviews with State and county Project Team members and ensuring escalation procedures are followed and issues are resolved
- Practicing change management controls and procedures in coordination with the State
- Preparing budgetary updates
- Monitoring and maintaining the Project's financial budget
- Ensuring the timely development and delivery of quality Project deliverables
- Monitoring and maintaining the development and implementation schedules
- Analyzing progress and suggesting changes as deemed appropriate
- Overseeing preparation of all documents, correspondence, and meeting agendas
- Developing and implementing a quality assurance process to ensure all objectives are met, milestones are achieved, and stakeholders are satisfied
- Informing the CMIPS Project Office of any issues that might cause Project delays

The Contractor Project Manager will identify any potential problem areas, recommend solutions, and work closely and cooperatively with the State Project Manager to resolve issues quickly and fairly. He/she will also provide the State Project Manager with written status reports and keep them informed of Project progress versus the work plans. The Contractor Project Manager will be responsible for instituting quality control over all deliverables submitted for review.

**Table 2. Contractor Project Manager Qualifications** 

Experience	MINIMUM	DESIRED
Project Management Experience	5 Years	10 Years
Project Management of large (at least \$30 million contract value) system integration project(s)	2 Years	5 Years
Shall have experience directing a team greater than (50) people	3 Years	5 Years
Postgraduate degree in Business Management or Technical degree related to proposed solution	N/A	Yes
2 years experience managing a project that adhered to IEEE 12207 Standards for Software Lifecycle Processes	N/A	Yes
Experience managing a project with SEI CMM Level 3 or higher certification	N/A	Yes
Project Management Institute Project Management Professional (PMI PMP) Certification	N/A	Yes

Experience	MINIMUM	DESIRED
PMP) Certification		
Project experience in state Social Services programs	N/A	Yes

#### **3.2.2.3.3** Contractor Project/Contract Administrator

The Contractor Project/Contract Administrator will be responsible for developing and maintaining the Contractor's administrative infrastructure. The position will monitor and administer the contract, and prepare, track, and submit deliverables and invoices to the CMIPS Project Office for payment. The position will coordinate the development of and maintain a repository for all project plans, schedules, deliverables, and project working papers. The Contractor Project/Contract Administrator will oversee all Contract amendments.

**Table 3. Contractor Project/Contract Administrator Qualifications** 

Experience	MINIMUM	DESIRED
Project Administration of large (at least \$30 million contract value) system integration project(s)	2 Years	5 Years
Contract Management of large (at least \$30 million contract value) system integration project(s)	2 Years	5 Years
Formal education in Contract or Procurement Management or related field	N/A	Yes
Certified Commercial Contract Manager (CCCM) Program from National Contract Management Association (NCMA)	N/A	Yes
Project experience in state Social Services programs	N/A	Yes

#### 3.2.2.3.4 Contractor Technical Project Manager

The Contractor Technical Project Manager (Contractor Technical PM) will be responsible for facilitating the system design, development, and implementation process and ensuring that appropriate technical resources are available to the State CMIPS Project team to expedite the discussion and resolution of system design, interface, testing, development, and operations issues. The Contractor Technical PM will participate in the system requirements definition and design meetings and the system interface design meetings, and will be responsible for the development and finalization of all system and user documents. The Contractor Technical PM will also manage the system development and testing activities and will be responsible for the preparation of all related status reports and deliverables.

**Table 4. Contractor Technical Project Manager Qualifications** 

Experience	MINIMUM	DESIRED
Experience with the technology proposed by the Contractor	5 Years	8 Years

Experience	MINIMUM	DESIRED
Experience in designing and implementing the technology proposed by the contractor across a Wide Area Network (WAN) to multiple remote locations	3 Years	8 Years
Experience in designing systems of at least the size (i.e., at a \$30 million contract value application development effort) and scope (i.e., full range of system development lifecycle activities) of this contract	3 Years	8 Years
Project experience in state Social Services programs	N/A	Yes
2 years experience on a project that adhered to IEEE 12207 standards for System Life Cycle Processes	N/A	Yes
Experience with an organization with SEI CMM Level 3 or higher certification	N/A	Yes

#### 3.2.2.3.5 Contractor Operations Manager

The Contractor Operations Manager will oversee the computer services for the CMIPS II system and manage all associated project staff. The Contractor Operations Manager will be responsible for all CMIPS II system operations, including planning, development, certification, conversion, batch processes, transaction processing, settlement, reconciliation, reporting, performance monitoring, and capacity planning/sizing. The Contractor Operations Manager will ensure the timely development and delivery of deliverables associated with operations. The Contractor Operations Manager will interact with State and county Project staff in evaluating and resolving all operational issues.

**Table 5. Contractor Operations Manager Qualifications** 

EXPERIENCE	MINIMUM	DESIRED
Operations Management experience with the technology proposed by	3 Years	5 Years
the Contractor		
Experience in Operations Management of a large application with 1000+ users	3 Years	5 Years
Experience in Operations Planning	3 Years	5 Years
Experience in system capacity and performance monitoring	2 Years	5 Years

#### 3.2.2.3.6 Contractor Systems Implementation Manager

The Contractor Systems Implementation Manager will be responsible for the timely coordination of all implementation related tasks. The Contractor Systems Implementation Manager will:

- Define all implementation tasks and critical path items
- Manage and monitor staff activities
- Monitor Project progress

- Identify issues and potential causes for Project delays
- Ensure that appropriate staff and Project resources are available to efficiently support the implementation activities including tracking and ordering systems
- Ensure the timely completion of each task in compliance with the Statewide Implementation Plan
- Ensure the timely development and delivery of implementation deliverables

**Table 6. Contractor Systems Implementation Manager Qualifications** 

Experience	MINIMUM	DESIRED
General systems implementation Management Experience	4 Years	6 Years
Systems Implementation Management of a large system with over 1,000 users.	3 Years	5 Years
Systems Implementation Management of a large system with over 100 remote locations	3 Years	5 Years
Management of a team larger than 12 staff	3 Years	5 Years
Project experience state Social Services programs	N/A	Yes
Experience with large system statewide implementations for a California government agency	N/A	Yes

# 3.2.2.3.7 Contractor Test Manager

The Contractor Test Manager will be responsible for the development and execution of a comprehensive Test and Evaluation Master Plan (TEMP) and detailed test plans, scripts and methodologies for each of the testing activities. The Contractor Test Manager will be responsible for planning, preparing and executing all testing activities and associated deliverables for the Contractor.

**Table 7. Contractor Test Manager Qualifications** 

EXPERIENCE	MINIMUM	DESIRED
Experience as Test Manager for a project with over 1000 concurrent	3 Years	5 Years
users		
Experience as a tester	5 Years	8 Years
Experience in developing, executing and maintaining tests using the	2 Years	5 Years
tool used by the Contractor		
Experience in testing on a project using the same technologies using	2 Years	5 Years
by the Contractor		
Project experience state Social Services programs	N/A	Yes
2 years experience managing a test team that adhered to IEEE 1012	N/A	Yes
standards for system verification and validation		

## 3.2.2.3.8 Contractor Customer Service Manager

The Contractor Customer Service Manager will have primary responsibility for managing all customer service related functions for system users. Duties include defining requirements and implementing customer services, managing the customer service center, training and managing Customer Services Representatives, monitoring customer service issues and performance, recommending issue resolution strategies, escalating performance issues, providing monthly and periodic statistical reports, and developing and maintaining appropriate problem escalation and resolution procedures.

 EXPERIENCE
 MINIMUM
 DESIRED

 Experience as Customer Service Manager for a project with over 1000 concurrent users
 3 Years
 5 Years

 Experience with the Help Desk and or Issue Tracking tools in use by the Contractor
 2 Years
 5 Years

 Experience in testing on a project using the same technologies using by the Contractor
 2 Years
 5 Years

**Table 8. Contractor Customer Service Manager Qualifications** 

#### 3.2.2.3.9 Funding Source Management Analyst

The Contractor shall provide general ledger expertise in the initial setup of the Funding Source Management system as defined in Section 6, SyRS, Paragraph 14.3.1, General Ledger and Paragraph 14.3.2, Funding Source Management.

EXPERIENCE	MINIMUM	DESIRED
Experience in setting up and initializing the type of software to be used in Funding Source Management.	3 Years	5 Years
Experience in operating the type of software to be used in Funding Source Management.	2 Years	5 Years
Experience in California State government accounting practices	2 Years	5 Years

**Table 9. Funding Source Management Analyst Qualifications** 

# 3.2.2.3.10 Contractor Legal Services Support

1. The Contractor shall provide all legal expertise necessary to support Contractor services and lawful compliance with the requirements of this RFP. The attorney(s) providing services to Contractor shall be specialists certified by the California State Bar Association. Contractor attorneys shall be available to communicate directly with the State.

#### 3.2.2.3.11 Contractor Training Manager

The Contractor Training Manager will have primary responsibility for managing all training for system users. Duties include interviewing and hiring trainers with participation of county and State CMIPS Project Office staff as directed by the State Project Manager, developing training materials and syllabus, managing updates and changes to training material, coordinating training sessions with county and State staff, conducting and analyzing surveys to determine effectiveness of training and to make improvements as needed.

EXPERIENCE	MINIMUM	DESIRED
Experience as Training Manager for a business application with over 1000 concurrent users	2 years	4 years
Experience conducting training on a business application with over 1000 end users.	2 years	4 years
Experience in developing and applying quality control procedures to training.	2 years	4 years
Experience in training on state social work programs	2 years	4 years
Experience managing a Training Team of over 10 trainers	2 years	4 years

**Table 8. Contractor Training Manager Qualifications** 

# 3.2.3 Deliverable Standards and Acceptance Process

Deliverables are specific products the Contractor is required to submit to the State CMIPS Project Office for review and potential approval upon completion of a task or subtask under the terms and conditions of the Contract. The list of deliverables is located in Section 7, DELIVERABLE LIST.

# 3.2.3.1 Deliverable Planning

- 1. The Contractor shall develop and submit a Deliverable Expectation Document (DED), in conformity with the standard defined at http://www.bestpractices.cahwnet.gov, for each deliverable to the State Contract Manager and gain State approval prior to deliverable preparation. The DED shall have a content description, proposed format, proposed media(s) and number of copies for each deliverable.
- 2. For document deliverables, the Contractor shall provide a table of contents as part of the DED.
- 3. For deliverables that are not documents, e.g., software, the DED shall include the proposed format and the method that will allow the State to review the deliverable.

4. For reoccurring deliverables, e.g., status reports, the contractor shall prepare for potential State approval a DED for only the first of the occurrences and another DED each time a change to a deliverable format is proposed.

# 3.2.3.2 Standards for State Acceptance of Deliverables

- 1. The Contractor shall submit deliverables to the State Contract Manager by the due dates defined in Section 7, DELIVERABLE LIST.
- 2. All document deliverables shall be provided in a Microsoft Office format unless otherwise approved by the State. The version of Microsoft Office shall be the same as the version used by the CMIPS Project Office. The Contractor shall use software versions that are compatible with the State's software.
- 3. The delivery media for deliverables will be compatible with State storage devices.
- 4. Each document deliverable over ten (10) pages shall include an Executive Summary.
- 5. For each deliverable, the Contractor shall deliver a written letter of transmittal to the State Project Manager to include the deliverable name, SOW reference, due date, and actual completion date. Deliverables shall have the following certification: "I certify that this deliverable has been prepared in accordance with the relevant terms and conditions of the Contract." A Contractor representative who is authorized to sign legal documents for the company shall sign each deliverable transmittal letter. The Contract shall specify the Contractor representatives who are authorized to sign any legal documents on behalf of the Contractor.
- 6. The deliverable shall address all Contractual requirements, the Contractor's response thereto, and any areas identified subsequently through meetings and planning sessions.
- 7. The deliverable shall address and be consistent with all components included in the DED as approved by the State Project Manager in preparation for development of the deliverable. Document deliverables shall be comprehensive in level of detail and quality consistent with the sample pages included in the DED to the State Project Manager.
- 8. The Contractor shall ensure that all document deliverables are managed in accordance with the Document Management Plan.
- 9. Documents shall be consistent in style and quality. This means that if the document is the composite work of many people within the Contractor's organization, the document will be edited for style and consistency. The Contractor shall certify in the cover letter that the Contractor utilized the internal deliverable review process as prescribed in a Quality Assurance Plan, Paragraph 5.3.1, Product Assurance.
- 10. The Contractor shall provide access to the State to all deliverable work in progress to allow the State to comment and support deliverable preparation.

# 3.2.3.3 Approval Process

State personnel will be responsible for reviewing each deliverable for approval purposes. Each deliverable will require a State turnaround time to be included in the Master Work Plan. While the State will endeavor to expedite the review of deliverables, and for general planning purposes the Contractor can assume the State's review time shall be not more than fifteen (15) business days unless the State notifies the Contractor that additional time is needed for its review. The State will provide the specific review duration with the DED approval. The State may notify the Contractor of a revision time longer than fifteen (15) business days when it is necessary.

- 1. When revisions to the deliverable are required by the State, the Contractor will receive written notification of said changes, and shall reflect them in the deliverable within five (5) business days of receiving the changes. The State may, at its discretion, allow a period longer than five (5) business days in consideration of the impact of the revision on the requirements by providing written notification to the contractor.
- 2. The State recognizes that the review times required could severely impact any project plan. Therefore the Contractor shall, for the purposes of work planning and scheduling assume that deliverable reviews will be held concurrently with other scheduled activities. During the periods of deliverable review prior to milestone reviews, unless otherwise directed by the State, the Contractor may initiate the next phase of the project.
- 3. Deliverables shall be considered complete and delivered upon written acknowledgement of deliverable acceptance by the State Contract Manager. Acceptance of a deliverable by the State indicates only that the State has reviewed the Deliverable and detected no Deficiencies at the time of that review and Acceptance of a Deliverable does not waive any Contract requirements or the Contractor's obligation to meet all Contract requirements and correct any later discovered deficiencies.
- 4. Deliverable updates due on a recurring basis, e.g., Per Release, may not need updating. Any update delivered that has not been changed since last delivered shall be marked as "No Update Required." This will allow the State to further expedite the approval process.
- 5. The State may notify the Contractor Project Manager in writing that the approval process for specific recurring deliverables has been suspended and that the Contractor shall assume that those specific deliverables have been approved when received by the State. Resumption of the approval process will also be provided to the Contractor Project Manager in writing.
- 6. If a deliverable is disapproved, the Contractor shall correct the deliverable and re-present it to the State within two (2) business days. If the modification needs longer than two (2) business days or at the State's request, the Contractor shall provide a Corrective Action Plan within two (2) business days of receiving the disapproval memo. The State Project Manager will review the Corrective Action Plan and if he/she approves, the Contractor shall execute the plan and conduct another deliverable review at the end of that process.

# 3.2.3.4 Deliverable Reporting

During development of deliverables the Contractor shall report progress and percentage completion as part of the Monthly Project Status Report. Reports shall at any point in time accurately reflect the incremental development of the deliverable. The Contractor shall also

report the completion of deliverables and their approval status in the Monthly Project Status Report.

## 3.2.4 Issue Management

Issues are any matter to consider, solve, or answer that may impact project, program, processes, or system.

- Project issues may have potential impact to the Project schedule or resources to include problems or questions concerning funding, staffing, organization, facilities, and contracts.
- Program issues may impact the IHSS/PCSP Program such as questions or changes that could affect IHSS/PCSP policy, staffing, funding, organization, or work load.
- Process issues may impact the execution of any project processes such as development, implementation, testing, operations, and maintenance.
- System issues impact the CMIPS II application and supporting equipment and documentation including, but not limited to, help desk calls, test results, business requirements changes including those identified through Business Process Improvement and Policy changes, performance requirement changes, and capacity planning requirements changes. Categories of system issues include but are not limited to:
  - o Requirements change
  - Production Defects
  - o Development Defects
  - User Assistance
  - County Infrastructure
  - o HHSDC Infrastructure
  - Development Infrastructure
- 1. The Contractor shall develop, deliver, maintain, and execute an Issue Management Plan that defines the issue identification and resolution process. The Contractor shall manage Project issues in accordance with the Issue Management Plan. The issue management process shall include:
  - a. Methods and techniques to identify, document, resolve, and track issues.
  - b. Method to capture issues from the Contractor and stakeholders to include the CMIPS II users, CMIPS Project Office Staff, CDSS Adult Program Branch staff, and Interface partners.
  - c. Methods to communicate issue resolutions
  - d. The type of staff necessary to identify and assign issues.
  - e. Identification of support teams or groups that will handle the analysis, resolution, and installation of the resolution.
  - f. System resources and tools necessary to carry out documentation and analysis of the issue.
  - g. Method and technique to detect trends in the issues reported.

- 2. The Contractor shall track, manage, and report issue status using a Contractor-operated automated tool as defined in Section 6, SyRS, Paragraph 7.1.5, Issue Tracking System. The Contractor shall give the State Project Office staff located in the same facility access to the issue-tracking tool.
- 3. The Contractor shall identify the severity of issues as a number from one (1) to six (6) as defined in Table 10 subject to the approval of the State Project Manager.

**Table 10. Severity Ratings for Issues** 

SEVERITY	DESCRIPTION OF ISSUE
Priority 1	An issue represents a deficiency that prevents a critical deliverable or process from achieving its fundamental purpose such that the deliverable or process is not usable for the purpose of this Contract until the deficiency is corrected, e.g., payroll warrants not being issued.
Priority 2	An issue represents a deficiency that prevents a process from properly executing or an element of a deliverable from meeting the Acceptance Criteria, that is adding unreasonable risk or work effort to the function, is materially jeopardizing the milestone dates defined in the Project Work Plan, or is jeopardizing system integrity, but that is not materially affecting or otherwise preventing adherence to the primary purpose of this Contract.
Priority 3	An issue represents a deficiency in which a process or deliverable achieves substantially all of the critical elements for such process or deliverable, but non-critical elements of the process or deliverable does not meet the Specifications and Acceptance Criteria but does not add undue risk or work effort to the Project, e.g., failure to maintain current plans and documentation, non-timely delivery of management reports, poor quality system deliverables or manual intervention is required to complete tasks defined as automated.
Priority 4	An issue represents a deficiency in which cosmetic or edit errors exist in the process or deliverable, such that the process or deliverable achieves all of the elements for Acceptance or substantially conforms to the agreed upon Specifications, but because the errors may be confusing, non-professional, cumbersome, or not user-friendly, the acceptability of the process or deliverable is diminished, e.g., misspellings, misleading headings, minor inaccuracies in documentation, non-conforming screen navigation or minor failures in maintenance of the Project Schedule.
Priority 5	An issue in which it is determined that the process or deliverable complies with the Specifications and Acceptance Criteria and exhibits the expertise and professionalism required of the Contractor, but the State determines that the design, plans, or System Implementation require modification, e.g., a new feature or function is added to the

SEVERITY	DESCRIPTION OF ISSUE	
	System, the State, at its own volition requests an update to a Project Work Plan milestone, or an additional previously undefined Report is requested.	
Priority 6	An issue is a request for information or assistance that does not affect or require any modifications to a process or deliverable.	

- 4. The Contractor's Issue Management process shall be a closed-loop process as defined in IEEE 12207, Paragraph 6.8, Problem Resolution Process. Issue Management shall be conducted in conjunction with other processes as appropriate.
- 5. The Contractor shall report status on issues in the Monthly Project Status Report and at weekly project status meetings. The Contractor shall report issue management metrics to include:
  - a. Number of issues opened, closed, and pending in reporting period by category and priority
  - b. Cumulative number of issues open and closed by category and priority
  - c. Issues by category and priority overdue by thirty (30) days, sixty (60) days, ninety (90) days, and over ninety (90) days
  - d. Issue Pareto Analysis
  - e. Number of issues by category and status
  - f. Aging Analysis of Issues by category.

# 3.2.5 Change Management

- 1. The Contractor shall develop, deliver, maintain, and execute a Change Management Plan that defines a change management process for issue resolutions that require a change to the project scope or a configured item.
- 2. The Contractor change management process shall support the State's Change Management Plan (CMP) to include, but not limited to:
  - a. The Contractor shall identify issues that require a change to the project scope or a configured item. The Contractor shall submit all issues with proposed changes and supporting documentation for potential State approval to implement through the Project Change Management Board (PCMB) in accordance with the CMP. The voting members of the PCMB include, the State Project Manager, Project Office System Architect, and CDSS Adult Program Branch Systems Unit Manager. The Contractor Project Manager and Contractor Technical Project Manager or their representative shall attend the PCMB but do not vote.
  - b. The Contractor shall update the issue resolution documentation to reflect PCMB decisions.
  - c. If the issue requiring a change to the project scope or a configured item is approved for implementation by the PCMB, the Contractor shall conduct additional analysis and

document the results in a Service Request. If the change affects the System, the Contractor shall prepare a System Service Request as described in Paragraph 4.3.3, Modification Management. For all other changes, the Contractor shall prepare a Project Service Request as described in Paragraph 4.6.9, Project Service Requests.

- d. If a Service Request is approved by the PCMB, the Contractor shall use the appropriate subprocesses to implement changes depending on the type of change.
  - i) <u>Changes to Configured Items.</u> The Contractor shall control changes to Configured Items according to the <u>Configuration Management Plan</u> defined in Paragraph 3.2.6.
    - (1) <u>Documentation changes.</u> The Contractor shall implement documentation changes according to the <u>Document Management Plan</u> defined in Paragraph 5.2.
    - (2) CMIPS II System Changes. The Contractor shall implement changes to the CMIPS II system according to Paragraph 4.3, System Maintenance and Enhancements and subparagraphs. System changes include the CMIPS II application and also the supporting software and hardware required to develop, operate, or maintain CMIPS II. Supporting software can include Commercial Off-the-Shelf (COTS) software and the Contractor shall be responsible for controlling COTS versions and implementing all COTS upgrades. Supporting hardware includes all equipment and can include equipment owned and maintained by the State; in that case, the Contractor may not directly modify or replace that equipment, but shall be responsible for coordinating with the affected organization(s).
  - ii) <u>Contract Scope Changes</u>. If a change is approved by the PCMB that requires a change to the Contract scope, the State and the Contractor will initiate a Contract amendment in accordance with the Contract, State CMIPS Contract Management Plan, and applicable requirements of DGS, DOF, CMS, or any other applicable provisions.
  - iii) Contractor shall base prices for Service Requests on the reasonable number of staff hours required multiplied by the Change Order Rates listed in the Contract Exhibit 3 plus any other reasonable costs to be incurred to effect the change at a fair and reasonable price.
- e. The Contractor shall record the finish dates of the final results of changes in the issue resolution documentation.
- f. The Contractor shall prepare and deliver PCMB Agendas and deliver formal PCMB Meeting Minutes for each weekly PCMB meeting.
- g. As part of the Monthly Project Status Report, the Contractor shall report the number of proposed changes submitted, the number approved, the number in progress, and the number completed in the reporting period.
- 3. The Contractor shall include Service Requests from the Legacy CMIPS System that were still open at Contract Award and shall ensure those Service Requests were properly resolved.

# 3.2.6 Configuration Management

Configuration Management is a process of version control and accountability for Configurable Items (CIs) to ensure:

- Everyone is working on the proper version of a work product.
- A work product can "roll back" to a previous version if needed.
- No software is released into a production environment without express written consent of the Configuration Control Board (CCB) and Project Change Management Board (PCMB).
- No work products are released without the planned reviews and/or testing being completed and documented.
- All software and related documentation that has been approved for a specific release is released to the production environment
- 1. The Contractor shall develop, deliver, maintain, and execute a Configuration Management Plan for the Project based on the processes and procedures defined in IEEE 828-1998, Standard for Software Configuration Management Plans, IEEE 12207, Standard for Information Technology Life-Cycle Processes, Paragraph 6.2, Configuration Management Process and DOF Information Technology Project Oversight Framework, to describe the methods to be used for configuration identification, control, status accounting, evaluation, and release management.
- 2. The Configuration Management Plan shall identify and baseline all CIs including:
  - a. System Specification
  - b. Project Master Plan
  - c. Software Requirements Specification
  - d. User Documentation
  - e. General Design Specification
  - f. Detailed Design Specification
  - g. CMIPS II Source Code
  - h. Test Specifications
  - i. Operation and Installation Manuals
  - j. CMIPS II application including Executable Programs and Scripts
  - k. Database Descriptions
  - 1. Maintenance Documents
  - m. Hardware
  - n. System software including O/S
  - o. COTS, standard products e.g., databases, middleware
  - p. Software releases
  - q. Service Management components and records e.g., Defects.
- 3. Beginning after the Project Initiation Review and through the remainder of the contract, the Contractor shall participate in weekly Configuration Control Board meetings to evaluate and organize changes approved from the Change Management Process in Paragraph 3.2.5. The CCB shall organize the CI changes into a release and ensure all related work products are kept synchronized with the updated CI.

- 4. The CCB will vote on whether to approve all CI versions. The voting members of the CCB shall include the State System Architect and State Lead System Engineer, CDSS APB Representative, or their designated representatives.
- 5. All CMIPS II release versions must also be approved by the PCMB prior to implementing any system changes.
- 6. The Contractor shall prepare and deliver CCB Agendas prior to each meeting and deliver formal CCB Meeting Minutes after each meeting.
- 7. The Contractor shall verify each release contains all changes approved by the CCB and report the results of the verification to the CCB.
- 8. For each CMIPS II release, the Contractor shall prepare and execute a Functional and Physical Configuration Audit, (FPCA) based on IEEE 1042-1987, Standard for Software Configuration Management, Paragraph 3.3.4, Audits and Reviews, to identify and describe the functional changes implemented in the release and the affected system components, deliverables, users, and documentation.
  - a. The FPCA shall verify the affected components were properly placed under configuration management. The Contractor shall deliver the results in the FPCA Report.
  - b. The Contractor shall coordinate with HHSDC for their support in conducting the physical audit.
- 9. As part of Quality Assurance for processes in Paragraph 5.3.3, Process Assurance, the State Quality Assurance staff will conduct, at least semi-annually, an audit of the Contractor's configuration management process and CIs to ensure they are complying with the Configuration Management Plan. The Contractor shall provide the State access to CIs and configuration management tools and records to conduct the configuration management audit.
- 10. The Contractor shall summarize configuration management activities in the Monthly Project Status Report.

### 3.2.7 Risk Management

- 1. The Contractor shall develop, deliver, maintain, and execute a detailed Risk Management Plan. The Contractor's risk management processes shall comply with IEEE 1540-2001, Standard for Software Life Cycle Processes-Risk Management and PMBOK Chapter 11, Project Risk Management. The Contractor shall manage Project risk in accordance with the Risk Management Plan.
- 2. Contractor shall provide input into the State's Risk Management Plan.
- 3. The Contractor shall use the Software Engineering Institute "Taxonomy Based Questionnaire" or similar risk identification aid in accordance with the DOF Information Technology Project Oversight Framework.
- 4. The Contractor shall report changes to Risk or risk related activities in the Monthly Project Status Report and weekly project status meeting.

### 3.2.8 Project Metrics

- 1. The Contractor shall develop, deliver, maintain, and execute a Metrics Plan in accordance with Practical Software Measurement; A Foundation for Objective Project Management; Version 3.1a; April 17, 1998 (Ref Section A.2 of IEEE 1061-1992, Standard for a Software Quality Metrics Methodology). The Metrics Plan shall provide definitions, methods, tools, reporting, and frequency of project metrics. The Contractor shall collect and report metrics according to the Metrics Plan.
- 2. The Contractor shall submit a Monthly Project Status Report to document the actual project progress against plans to include:
  - a. Project Schedule summary with planned and actual completion dates for major activities
  - b. Graphic of actual versus budgeted costs by month
  - c. Graphic of cumulative cost versus budgeted cost to date by month
  - d. Status of Project deliverables and milestones relevant to the reporting period
  - e. Key activities planned and accomplished in the reporting period to include identification of critical path activities
  - f. Key activities planned for the next ninety (90) days to include identification of critical path activities
  - g. Project metrics relevant to reporting period.
- 3. In addition to those listed above, the Contractor shall include the following items, as applicable, in the Monthly Project Status Report:
  - a. Updated milestone schedule summary as defined in Paragraph 3.1.3, Schedule
  - b. Summary of CAP activities as defined in Paragraph 3.2.10, Corrective Action Plan (CAP) and Liquidated Damages
  - c. Schedule Variance as defined in Paragraph 3.2.1.5, Schedule and Budget Metrics
  - d. Schedule Performance Index (SPI) as defined in Paragraph 3.2.1.5, Schedule and Budget Metrics
  - e. Critical path as defined in Paragraph 3.2.1.5, Schedule and Budget Metrics
  - f. Cost Variance as defined in Paragraph 3.2.1.5, Schedule and Budget Metrics
  - g. EAC as defined in Paragraph 3.2.1.5, Schedule and Budget Metrics
  - h. Staffing shortages as defined in Paragraph 3.2.2.1, Project Staffing Plan
  - i. Progress and percentage completion of deliverables under development as defined in Paragraph 3.2.3.4, Deliverable Reporting
  - j. Progress of the software development effort and metrics as defined in Paragraph 4.1.7, Development Phase reporting and Metrics.
  - k. Status of Test and Evaluation as defined in Paragraph 4.2.7, System Test and Evaluation Reporting and Metrics
  - l. Work plan updates for each hardware modification as defined in Paragraph 5.7.2 Hardware Support
  - m. Work plan updates for each major supporting software modification as defined in Paragraph 5.7.3 Software Maintenance

- n. Business Change Management status as defined in Paragraph 4.5.3.1, County Business Change Management and Paragraph 4.5.3.2, State Business Change Management
- o. Public Outreach activities and results as defined in Paragraph 4.9), Public Outreach
- p. Site preparation status as defined in Paragraph 4.5.4.3, Site Preparation
- q. Data cleanup status and metrics as defined in Paragraph 4.5.4.1, Data Cleanup
- r. Data conversion status as defined in Paragraph 4.5.4.2, Data Conversion
- s. Transition status as defined in Paragraph 4.5.9, Business Services Migration
- t. County/site deployment status as defined in Paragraph 4.5.7.2, County Deployment Execution
- u. Implementation status as defined in Paragraph 4.5.11, Implementation Reporting and Metrics
- v. Program support activities and metrics as defined in Paragraph 4.6.12, Program Support Reporting and Metrics
- w. Quality assurance activities as defined in Paragraph 5.3, Quality Management
- x. Issues status as defined in Paragraph 3.2.4, Issue Management
- y. Change management status as defined in Paragraph 3.2.5, Change Management
- z. Configuration management activities as defined in Paragraph 3.2.6, Configuration Management
- aa. Status on any additional activities as requested by the State Project Manager.
- 4. In addition to Monthly Project Status Reports, the Contractor shall participate in weekly project status meetings with the State to discuss project status. During the weekly project status meetings, the Contractor shall:
  - a. Present a summary of the status of active work plans to include, but not limited to:
    - i) Report status on issues as defined in Paragraph 3.2.4, Issue Management
    - ii) Report status of Risks as defined in Paragraph 3.2.7, Risk Management
  - b. Present Lessons Learned and issues for the implementation from the Release Implementation Review within two (2) weeks of implementation completion as defined in Paragraph 4.3.5.3, Quarterly Release Tailoring
  - c. Report status on any additional activities as requested by the State Project Manager
  - d. Overview of tasks schedule to start or be completed in the next reporting period.

The State will compare reported costs and activities to Project invoices. The payment of the invoice may be delayed if there are discrepancies between reported and invoiced costs and activities.

# 3.2.9 Quarterly Project Management Reviews

1. The Contractor shall support, at least quarterly, the CMIPS Project Office Quarterly Project Management Reviews with relevant stakeholders that include senior managers and control agencies. The Contractor shall provide information for each review to evaluate Project Status to include:

- a. Summarize project schedule to ensure activities are progressing according to plan, based on an evaluation of the activity or software product status.
- b. Summarize resource allocations to ensure project is adequately funded, staffed, and equipped.
- c. Identify the risks and issues that may jeopardize the project and/or need to be elevated to senior management or control agency for resolution.
- d. Present project metrics to include, but limited to:
  - i) Cost Variance with reasons for the variances. If the variance is negative, the Contractor shall explain how the situation will be rectified.
  - ii) Schedule Variance with reasons for the variances. If the variance is negative, the Contractor shall explain how the situation will be rectified.
  - iii) Estimate at Completion (EAC) metric for the overall project and current project phases.

### 3.2.10 Corrective Action Plan (CAP)

- 1. If the Contractor fails to meet the requirements of this Contract, the Contractor shall provide and execute a Corrective Action Plan (CAP) as directed by the State.
- 2. The Contractor shall prepare Corrective Action Plans (CAP), in accordance with IEEE 12207 Paragraph 7.1.3.3, Management Process Execution and Control. The CAP shall contain the reason for the deviation and corrective action with assigned resources and schedule.
- 3. The contractor shall not execute the CAP until receiving the State's approval of the plan.
- 4. The Contractor shall report the progress of CAP activities weekly to the CMIPS State Project Manager. The CAP activities will be summarized in the Monthly Project Status Report.
- 5. The Contractor shall notify the State in writing when the CAP has been successfully completed and shall deliver any documentation required to review and approve the CAP completion. The CAP will be considered complete subject to the review and approval of the State.
- 6. Failure of the Contractor to prepare, produce and successfully execute a CAP, or if the executed CAP does not correct the deficiency, shall result in the assessment of Liquidated Damages as defined in the Section 11, MODEL CONTRACT.

# 3.3 Project Initiation

The purpose of the Contract Project Initiation is to provide the Contractor time for project rampup and to ensure all required plans and processes are in place prior to beginning work on the system. This is the time to establish or clarify roles and responsibilities in the joint processes, and expectations for each phase of development.

1. As part of the Project Master Plan (Paragraph 3.1.1), the Contractor shall define processes and resources necessary to ensure orderly startup of the Project to include staffing, process, and infrastructure initiation.

- 2. The Contractor shall develop and deliver a detailed Project Initiation WPU to supplement the Master Work Plan defined Paragraph 3.1.2.
- 3. The Contractor shall initiate the Project according to the Project Master Plan and Project Initiation WPU.
- 4. The Project Initiation phase shall be concluded upon successful Project Initiation Review as referenced in Paragraph 5.3.4.3, Milestone Reviews. The criterion for passing the Project Initiation Review is that the Contractor demonstrates that they have successfully completed the initiation activities and work products identified in the Project Master Plan (Paragraph 3.1.1) and Project Initiation WPU.

# 3.4 Project Closeout

- 1. The purpose of project closeout is to finalize project activities and transfer project assets and processes to the appropriate organizations. As part of the Project Master Plan, the Contractor shall define a plan necessary to ensure orderly closeout of the software project to include a plan for archiving project materials, system migration at Contract termination for cause, for convenience, and at expiration of the Contract term, a plan for post-mortem debriefings of the project, and preparation of a final report to include lessons learned and analysis of project objectives achieved. One (1) year prior to Contract termination, the Contractor shall prepare a separate detailed Project Closeout Plan and Project Closeout WPU for system migration at Contract termination as described in Paragraph 3.4, Project Closeout. The Contractor shall close out the Project according to the Project Closeout Plan and WPU approved by the State.
- 2. The Project Closeout Plan shall provide:
  - a. Transfer of application operations and maintenance to new vendor or State.
  - b. Transfer of all tools and licenses and/or related data needed to maintain the CMIPS II application.
  - c. Delivery of current system and supporting documentation, to include but not limited to all Deliverables specified in Section 7, DELIVERABLE LIST.
  - d. Transfer of supporting project data to the State to include change requests, Help Desk requests, issues, and risks.
  - e. Support of the migration to the new vendor through knowledge transfer to new vendor or State staff.
  - f. Support the State's PIER process in accordance with the DOF Information Technology Project Oversight Framework.
  - g. Identification of Lessons Learned in accordance with the DOF Information Technology Project Oversight Framework.
- 3. The Project Closeout phase shall be concluded upon successful Project Closeout Review as referenced in Paragraph 5.3.4.3, Milestone Reviews. The criterion for passing the Project Closeout Review is that the Contractor demonstrates that they have successfully completed the activities and work products identified in the Project Closeout Plan.

#### 4 TECHNICAL PROCESSES

The technical processes include the services required to design, develop, test, implement, operate, and maintain CMIPS II and support the IHSS/PCSP Program.

- 1. The Contractor shall use proven software life cycle and project management processes to include IEEE 12207, Standard for Information Technology Software Life Cycle Processes and IEEE 1058, Standard for Software Project Management Plans.
- 2. The Contractor shall provide the State all necessary (as determined by the State) access to the production environment, data, and system resources to validate and verify the technical processes and system requirements.
- 3. In addition to any other applicable State and Federal laws, the solution shall comply with Section 508 of the Rehabilitation Act Amendments of 1998 for accessible web design and compatibility. The website shall adhere to W3C Web Content Accessibility Guidelines 1.0 Conformance Level A and Priority Level 2 checkpoints 10.2 and 12.4 selected by the State. The website shall adhere to technical standards for accessible Web design and compatibility, located in the Accessibility Guide and the Style Implementation Guidelines, pursuant to Executive Order D-17-00 issued on September 8, 2000.

# 4.1 System Development

- 1. The Contractor shall develop a system to meet the requirements stated in Section 6, SyRS.
- 2. The Contractor shall identify life cycle methodology for each development cycle that includes:
  - a. System Development Planning
  - b. System Requirement Validation
  - c. System General Design
  - d. System Detailed Design
  - e. Coding and Documentation

### 4.1.1 System Development Planning

- 1. As part of the Technical Processes for the Project Master Plan (Paragraph 3.1.1) the Contractor shall develop, deliver, maintain, and execute a System Development Plan to specify the development process model, the technical methods, tools, and techniques to be used to develop the various work products; and plans for establishing and maintaining the Contractor's infrastructure for development and testing. The Project Master Plan should follow guidance on system development planning in IEEE 12207 Paragraph 5.3, Development Process and IEEE 12207.1-1997, Standard for Information Technology Software Life Cycle Processes Life Cycle Data, Paragraph 6.5, Development Process Plan.
- 2. In accordance with the DOF Information Technology Project Oversight Framework, the Contractor shall use a formal software size estimation method where custom software development or COTS modifications are a significant component of the cost. The Contractor

shall use two or more estimation approaches (top-down, bottom-up, parametric) to refine estimates. The State will independently review the estimates.

- 3. The Contractor shall prepare and deliver work plan updates for each phase of system development to supplement the Master Work Plan as described Paragraph 3.1.2, to include:
  - a. System Requirement Validation WPU
  - b. General System Design WPU
  - c. Detailed System Design WPU
  - d. Coding and Documentation WPU

### 4.1.2 System Requirements Validation

- 1. The Contractor shall perform system requirements validation according to the Project Master Plan.
- 2. The System Requirements Validation shall include review of the IHSS/PCSP documentation; review of Federal and State laws, including but not limited to those laws regarding Federal and State tax withholding, regulations, and procedures; review of current system documentation including design documents and manuals; analysis of existing code; and business process analysis including focus groups and surveys. This phase is the foundation for the remaining phases. It is critical that the requirements be clear, complete, testable, and truly representative of the business needs.
- 3. The System Requirements Validation shall determine the baseline requirements for the system. While the requirements defined in the SyRS will serve as the base requirement set to perform requirements validation phase, modification to the base requirement set should be expected and included in the fixed price. The requirements approved by the State, as a product of the System Requirements Validation Review, will be the baselined set of requirements against which change management control shall be applied as described in Paragraph 3.2.5, Change Management.
- 4. During the DDI phase, the Contractor shall validate and verify all requirements contained in the SyRS and deliver the SyRS Evaluation Report. The SyRS Evaluation Report shall summarize the deficiencies or clarifications in the SyRS. The Contractor shall deliver an electronic copy (in MS Word format with changes tracked) of a revised SyRS with recommended language to remedy deficiencies or provide clarification. The State will be responsible for reviewing the recommendations and updating the configuration-controlled SyRS accordingly.
- 5. During the M&O phase, the Contractor shall conduct a System Requirements Validation for every application release. If the modifications in the release require a change to the SyRS, the Contractor shall prepare a SyRS Evaluation Report with recommended language to update the SyRS.
- 6. The Contractor shall perform a Technology Review as part of requirements validation performed in the initial DDI for any major modification, as defined by the State in writing. The Technology Review shall identify technology options consistent with the system that would meet the business requirements and improve program or system efficiency or improve

customer service or reduce project cost. The State would like to be able to take advantage of technology innovations that emerge after the Contract is initiated, especially for system components that could be developed and implemented years after the Contract start date. The Technology Review shall also include an evaluation of the Commercial Off-the Shelf (COTS) software versions to ensure system development is performed on the latest stable versions.

### 4.1.3 Concept of Operations Scenarios

- 1. The Contractor shall develop and deliver a Concept of Operations for CMIPS II for the State to use in evaluating Contractor proposals and to help communicate the CMIPS II system approach to the CMIPS II users.
- 2. The Contractor shall develop the Concept of Operations using IEEE 1362 –1998, Standard for Information Technology Concept of Operations (ConOps) Document, as a guideline; tailored as described in this section.
- 3. The Concept of Operations must include only a System Overview and detailed Operations Scenarios.
- 4. The proposed System Overview should not exceed ten (10) pages and shall provide a high-level description of the following:
  - a. Operational environment and its characteristics
  - b. Major system components and the interconnection among these components
  - c. Interfaces to external system
  - d. Capabilities and functions
  - e. Inputs, outputs, data flow, and manual and automated processes
  - f. Operational risk factors
  - g. Performance characteristics
- 5. The Concept of Operations must be developed using business terminology used by the IHSS/PCSP Program; examples of the terms can be found throughout this RFP and in Appendix A, Acronyms and Glossary. The Concept of Operations must refer to system users by the roles identified in Artifact 4 User Roles, located in the Bidder's Library.
- 6. The Operations Scenarios must include <u>all</u> of the scenarios described below. Each Operations Scenario must include a step-by-step description of how the proposed system should operate and interact with its users and external interfaces. Scenarios should be described in a manner that will allow evaluators to walk through them and gain an understanding of how all the various parts of the proposed system function and interact.

#### a. Case Management.

i) <u>Scenario 1:</u> Describe the process from case referral through IHSS assessed need authorization including Provider assignment and allocation of Share of Cost.

A representative for an applicant for IHSS services calls the County Welfare Department (CWD) to apply for services. The representative provides demographic and service needs information for the applicant. The CWD assigns a Social Worker to the case, schedules an in-home visit, and visits the home of the applicant. The Social Worker (SW) performs the needs assessment, identifies the household characteristics and identifies others living in the household and receives services mode information from the Recipient indicating they would like an Independent Provider mode. The SW returns to the office and computes hours for required services, requests a Share of Cost (SOC) calculation from the SAWS system (the Recipient will require a \$75.00 Share of Cost), links the independent Provider to the Recipient, and requests authorization of hours from supervisor. The Recipient receives notification of the actions.

ii) <u>Scenario 2:</u> Describe the Inter-county transfer process including thirty (30) day overlap in which both counties (Transferring and Receiving) will need access to Recipient and Provider information.

On July 29, County A is notified by a Recipient of their intent to move to County B, effective September 1. County A notifies County B that the Recipient is moving to into their county. County A will need to initiate the Inter-County transfer process as defined in Section 6, SyRS, Paragraph, 11.2.3, Inter-County Transfer, continue case management services, continue Provider payroll services, and also need to begin the Termination Process as described in Section 6, SyRS, Paragraph 11.2.5, Recipient Termination. County B will need access to the Recipient and Provider information in order to begin the Case Initiation Process as defined in Section 6, SyRS, Paragraph 11.1, Case Initiation, to have services effective in County B on September 1.

#### **b. Payroll.** Describe the process for the following situation:

i) <u>Scenario 3:</u> Provider sporadically turns in timesheets, not in chronological order and with lengthy gaps between submissions.

The non live-in Provider began providing services for Recipient on September 1. The Provider is potentially working under Fair Labor Standards Act rules in addition to IWC Work Order 15. The Provider submits the timesheet for September 1-15 (See example A) on September 16. The timesheet is processed and the Provider receives a payroll warrant for hours worked. The Provider submits a timesheet for October 1-15 (See example B) on October 16. The timesheet is processed and the Provider receives a payroll warrant. On November 10, the Provider turns in the timesheet for September 16-30 (See Example C). How would the system evaluate overtime?

#### Example A

	September Pay Period 1															
Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Day	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	
Hours	8	4	8	8	0	8	8	8	0	8	8	0	8	8	10	94

#### **Section 6 – Technical Requirements – Statement of Work (SOW)**

#### Example B

						(	October	Pay P	eriod 1							
Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Day	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	
Hours	8	8	0	8	8	8	0	8	8	2	8	8	8	0	8	90

#### Example C

						Sept	ember	Pay Per	riod 2							
Date	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
Day	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	
Hours	0	8	8	6	8	8	8	0	8	8	0	8	8	8	10	96

ii) <u>Scenario 4:</u> Recipient has more than one Provider (Provider may be spouse), how does the system make sure that hours authorized to one Provider are not paid to another Provider.

The Recipient has fifty-four (54) hours authorized to Provider A and 16 hours authorized to Provider B. Provider A's timesheet for seventy (70) hours is received for processing on November 16. Provider B's timesheet for sixteen (16) hours is received for processing on November 17.

iii) Scenario 5: Recipient requires Advance Pay.

A severely disabled Recipient chooses the advance pay option and is eligible to begin receiving advance pay on September 1. The Recipient has previously identified Provider A as their independent Provider. The Recipient receives an advance pay warrant for one hundred twenty (120) hours. How would the system process Advance Pay as described in Section 6, SyRS, Paragraph 12.1.5.1.2, Advanced Pay Reconciliation? Provider A provides one hundred (100) hours of services from September 1 – 30. The Provider and Recipient both sign the timesheet and the county receives that timesheet on October 5. How is the timesheet reconciled with the original warrant? How are tax deductions addressed?

#### c. Provider Management

Scenario 6: Individual Provider assigned to Recipients in more than one county.

Santa Clara County receives a notification from a Recipient who has hired an Individual Provider. On entry of the IP information, the system recognizes the IP as already known to the system and authorized nineteen (19) hours per week to a recipient in San Mateo County. How would the system allow Santa Clara County to complete the mode of service assignment process of this Provider to the Recipient in Santa Clara County as described in Section 6, SyRS, Paragraph 11.1.4, Assign Mode of Service?

#### d. Program Management

Scenario 7: Caseload reassignments.

Due to a steady increase in caseload, County A has received approval to hire an additional Social Worker. The Social Worker Supervisor decides to distribute the existing caseload among the two (2) existing and the one (1) new Social Worker by zip code. The county services three zip code areas. This requires re-assignment of over sixty percent (60%) of the caseload. How would CMIPS II accomplish the re-distribution of the caseload?

#### e. Forms Generation

<u>Scenario 8:</u> The Social Worker requests an in-home assessment packet.

In preparation for the in-home visit, Social Workers identify forms that may be necessary for a particular applicant based on information already received during the referral process. The Social Worker needs the ability to retrieve individual forms as well as predetermined packets of forms. Describe how the Social Worker requests and receives the forms and how the system accommodates these needs?

#### f. Reports

<u>Scenario 9:</u> Monthly Report. The counties need to review caseload information by Social Worker, by Zip Code, by District Office and in combinations of these sorts.

The counties request the ability to receive the reports in other formats as well as printed. How will CMIPS II provide a flexible, user-friendly reporting structure to meet these needs? Describe how a Social Worker Supervisor will request and receive the caseload report.

# 4.1.4 General System Design (GSD)

The purpose of the General System Design phase is for the Contractor to document the design of the new system based on the requirements. The design will incorporate and account for all requirements that have been identified.

- The Contractor shall develop, deliver, and maintain a General System Design, based on IEEE 1219-1998, Standard for Software Maintenance and IEEE 12207-1996, Standard for Information Technology Software Life Cycle Processes, Paragraph 5.3.3, Development Process, System Architectural Design, that describes the top-level architecture of the system. The GSD shall identify both hardware and software components and provide a top-level description of how the system requirements are allocated among the system components.
- 2. The Contractor shall develop, deliver, and maintain an Interface Design Description (IDD), based on IEEE 12207-1996, Standard for Information Technology Software Life Cycle Processes, Paragraph 5.3.6.2, Development Process, Software Detailed Design. For each external interface, the IDD shall identify the system, responsible office, interface method, data elements, frequency, format, and media. The Contractor shall ensure all data provided through interfaces meet standards established by the interface organization.
- 3. The Contractor shall develop, deliver, and maintain a Logical Database Design (LDD), based on IEEE 12207-1996, Standard for Information Technology Software Life Cycle Processes, Paragraph 5.3.6.3, Development Process, Software Detailed Design to include at

minimum a fully described data dictionary, Entity Relationship Diagram(s), and transaction entry point analysis.

- 4. The Contractor shall develop, deliver, and maintain an Architecture Design Specification (ADS), based on IEEE 12207-1996, Standard for Information Technology Software Life Cycle Processes that details in both production and development environments:
  - a. All hardware components of the solution
  - b. All software components of the solution, including developed software
  - c. Where each component resides in the enterprise including at least one diagram illustrating the enterprise architecture and it's components
  - d. The forms, reports, timesheet processing and interface architectures
  - e. Identify the purpose of each component and how each component will support the solution to meet the requirements of the State
  - f. Which components are customized vs. "out of the box"
  - g. The configuration of each component.
  - h. IT security of each component.
  - i. How the configuration of the system meets HHSDC support requirements
- 5. The Contractor shall include the following in the GSD, IDD, LDD and ADS:
  - a. Provide a feasible solution to fulfilling their allocated requirements
  - b. Are traceable to the system requirements
  - c. Provide a consistent, unambiguous design description
  - d. Will result in efficient and cost effective operations and maintenance.
- 6. The GSD shall include a Requirements Traceability Listing showing the relationship between the GSD and SyRS requirements.
- 7. The Contractor shall update the GSD, IDD, LDD, and ADS throughout the development effort to reflect the as-built design.
- 8. The Contractor shall participate in a General System Design Review (Paragraph 5.3.4.3, Milestone Reviews) to ensure planned activities were successfully completed and evaluate the resultant work products.

# 4.1.5 Detailed System Design (DSD)

The purpose of the Detailed System Design Phase is for the Contractor to document the design of the software components based on the requirements. The design will incorporate and account for all requirements that have been identified.

 The Contractor shall develop, deliver, and maintain a Detailed System Design that identifies software components and provide a detailed description of how the system requirements are allocated to those software components. The DSD shall meet the requirements of IEEE 1016-1998, Recommended Practice for Software Design Descriptions; IEEE 1219-1998, Standard for Software Maintenance; IEEE 12207-1996, Standard for Information Technology – Software Life Cycle Processes, Paragraph 5.3.5, Development Process, Software Architectural Design and IEEE 12207-1996, Standard for Information Technology – Software Life Cycle Processes, Paragraph 5.3.6, Development Process, Software Detailed Design. The software items shall be refined into lower levels containing software units that can be coded, compiled, and tested. The DSD shall allocate all the system and software requirements from the software components to software units.

- 2. The Contractor shall develop, deliver, and maintain a detailed Database Design Description (DDD). The DDD shall include any modifications to the data dictionary, Entity Relationship Diagram(s), transaction entry point analysis, and physical database design. The Contractor shall ensure that the entire DDD is normalized to third normal form. Any exceptions to this degree of normalization shall require prior approval by the State.
- 3. The Contractor shall ensure the DSD and DDD:
  - a. Provide a feasible (as determined by the State) solution to fulfilling the requirements
  - b. Are traceable to the system and component software requirements
  - c. Provide a consistent, unambiguous design description
  - d. Will result in efficient and cost effective (as determined by the State) operations and maintenance.
- 4. The Contractor shall update and deliver the DSD and DDD for every application release to ensure the design documents describe the entire, as-built CMIPS II application.
- 5. The Contractor shall participate in a Detailed System Design Review (Paragraph 5.3.4.3, Milestone Reviews) to ensure planned activities were successfully completed and evaluate the resulting work products.

# 4.1.6 Coding and Documentation

The purpose of the Code milestone is for the Contractor to develop the code and configure the COTS software for the new system based on the requirements.

- 1. The Contractor shall code and deliver the CMIPS II Application Software that meets the requirements stated in the System Requirements Specification (SyRS) according to the Detailed System Design (DSD), the Database Design Description (DDD), and in accordance to IEEE 1219-1998, Standard for Software Maintenance. The Contractor shall identify and adhere to Software Engineering Standards, as defined in paragraph 2 below, which will produce software that is consistent, maintainable and testable
- 2. The Contractor shall define, document, deliver, maintain, and adhere to Software Engineering Standards (SES). The SES shall provide the development team sufficient guidance and control points to support production and maintenance of a cohesive, maintainable, and standard product. The SES shall include but is not limited to:
  - a. Coding standards for:
    - i) All development tools in use
    - ii) All operating system scripting languages and Database Definition Scripts

- iii) Database access languages, e.g., SQL, stored procedures etc
- iv) Error handling standards at all tiers of the system
- v) Database transaction handling standards
- vi) User Interface Standards
- vii) All configuration and initialization files
- viii) Memory management
- ix) Variable initialization especially for re-entrant code
- x) Techniques for ensuring data integrity in database updates when not holding database locks over terminal input/output
- b. Standards for the processes in how code is developed
- c. Requirements checklist for code to pass peer review and ensure adherence to the SES
- d. Standards for database design and development
- e. Standards for use of the Configuration Management tools implemented
- f. Techniques and guidelines to ensure efficient database data access, retrieval, and modification. Efficiency in this case is ensuring that any query minimizes the system resources required including CPU, disk I/O, memory and database lock contention.
- 3. The Contractor shall develop, deliver, and maintain user documentation.
  - a. The Contractor shall identify the user documentation using the methodology of IEEE 1063-1987, Standard for Software user documentation, to include User's Manuals, System Administration Procedures, and Help Desk Procedures.
  - b. The User's Manual for the county users shall include system operations instructions for every function of the system, integrated with the related CMIPS/IHSS procedures in the same manner as the CMIPS User Manual published by CDSS APB in 2003.
  - c. The Contractor shall print and distribute two thousand five hundred (2,500) User's Manuals with the initial system implementation.
  - d. Manuals and procedures, that meet the standards identified in Paragraph 4.6.6, Website Management, shall be available online and in printable format. The webbased manuals and procedures shall be printable at the user's request at their site.
  - e. When the Contractor updates the user documentation and procedures, they will notify the users and distribute printed update pages to requesting counties; the county will be responsible for keeping the printed material current.
  - f. The Contractor shall release all user documentation and procedures updates to the website and be responsible for keeping the web version in parallel with software release. Online help tools shall be integrated with the CMIPS II application and workflow to ensure users have timely access to information necessary to accomplish their CMIPS II activities.
  - g. All user documentation shall be prepared using IEEE 1063 as a guideline, tailored as needed for web-based or online documentation.

- h. Manuals and procedures (complete, particular section and/or individual pages) shall be printable at the user's request at their site. Where practical, online help tools shall be integrated with the CMIPS II application and workflow to ensure users have timely access to information necessary to accomplish their CMIPS II activities.
- i. All user documentation will be developed and delivered incrementally. During the initial system development the Contractor shall deliver at least three versions of the user documentation; one for each milestone of the Detailed Design Review, Coding and Documentation Review, and Release Readiness Review. Each version shall build on the previous version with an increased level of detail that is equal to the level of detail available about the system design.
- j. The Contractor shall update all user documentation for the remainder of the Contract to reflect the as-built system. During the maintenance and operation phase, the Contractor shall deliver updated user documentation for the Release Readiness Review for every application release.
- 4. The Contractor may use tools to help develop code and/or documentation. The State staff will need access to the tools, code, and documentation for evaluation and testing purposes. If a Contractor chooses to use tools, the Contractor shall provide licenses and access on at least three (3) workstations for State staff.
- 5. The Contractor shall participate in a Coding and Documentation Review (Paragraph 5.3.4.3, Milestone Reviews) to ensure planned activities were successfully completed and evaluate the resulting work products.

### 4.1.7 Development Phase Reporting and Metrics

As part of the Monthly Project Status Report, the Contractor shall report the progress of the software development effort and metrics including planned and actual percent complete by milestone.

# 4.2 System Test and Evaluation

The system will be tested in stages to ensure the number of variables is kept to a minimum in both the application and test environment for each stage of testing. Separate test and production systems shall be maintained. Additional development system(s) may be used as necessary. No testing or development shall be performed on a production system. Testing will start with the evaluation of the simplest element, a unit of software in a test environment, and progress to the most complex, the full system in the production environment. With this in mind, the phases of testing will include:

- Software Unit and Component Testing
- Integration Testing
- Functional Testing
- System Performance Testing
- System Stress Test
- Regression Testing

• User Acceptance Testing

Table 11 gives a high-level description of these test phases:

**Table 11. Test Phases** 

TEST TYPE	DESCRIPTION	EMPHASIS OF TEST
Software Unit and Component	SCOPE: Individual Code Units/Groups of Code Units ENVIRONMENT: Development DATA: Artificial	<ul> <li>Every line of code</li> <li>All error paths</li> <li>Code inspection of non-testable paths</li> <li>Small groups of modules that are functionally related</li> <li>Inter-module/intra-function interfaces</li> </ul>
Integration	SCOPE: Functional Groupings ENVIRONMENT: Development/Test DATA: Simulated	<ul> <li>Major functional areas</li> <li>Inter-function interfaces</li> <li>Basic business cases and workflows</li> <li>Critical external interfaces</li> </ul>
Functional	SCOPE: Entire System, End-to-End ENVIRONMENT: System Test environment DATA: Real	<ul> <li>Entire System</li> <li>Verify all requirements</li> <li>Verify common error cases</li> <li>External interfaces</li> <li>Verify data conversion results and data load programs</li> <li>User testing of business workflows</li> </ul>
System Performance	SCOPE: Performance Requirements ENVIRONMENT: Performance Testing environment DATA: Real	<ul> <li>Verify performance requirements are met</li> <li>Verify no degradation of performance between releases</li> </ul>
System Stress	SCOPE: Testing the system under stress ENVIRONMENT: Performance Testing environment DATA: Simulated	Ensure system can handle anticipated peak loads
Regression	SCOPE: Verify other areas of the system have not been adversely affected ENVIRONMENT: Regression Testing environment DATA: Real	<ul> <li>Ensure system performs as expected</li> <li>Verify normal and critical workflows and processing paths</li> <li>Verify user reports</li> </ul>
User Acceptance	SCOPE: Typical User Scenarios ENVIRONMENT: UAT Testing environment DATA: Real	<ul> <li>Does the system address the users' needs?</li> <li>May do formal regression testing of fixed errors from System testing for users</li> <li>Workflow and business scenarios</li> </ul>

Artificial – Data created to follow a code path or test specific test cases

Simulated - Data created to model real data

Real - Data that was processed on the Legacy CMIPS System and is now being re-used for testing

# 4.2.1 Test and Evaluation Roles and Responsibilities

The roles and responsibilities for each phase of testing are defined in Table 12:

Table 12. Test Roles and Responsibilities

TEST PHASE	CONTRACTOR	STATE PROJECT STAFF	SPONSOR	USER	IV&V
Software	<ul><li>Primary</li></ul>	Review test mgmt activities,	None	None	<ul> <li>Review test</li> </ul>

### Section 6 – Technical Requirements – Statement of Work (SOW)

TEST PHASE	CONTRACTOR	STATE PROJECT STAFF	SPONSOR	USER	IV&V
Unit and Component	responsibility for conducting tests	test activities, and test documentation for completeness, correct process, and adherence to processes and standards			activities and documentation for adherence to processes, standards, and for appropriate rigor, if appropriate
Unit Level Verification of Non- Testable Requirement	Primary responsibility for conducting tests	Primary responsibility for verification     Track version and code units where the verification takes place     Review test mgmt activities, test activities, and test documentation for completeness, correct process, and adherence to processes and standards     Ensure verification methods are correctly applied and documented	• Receive report on results and methods	None	Review test     activities and     documentation for     adherence to     processes,     standards, and for     appropriate rigor     Ensure the     selected verification     method is correct     and appropriate for     the type of     requirement being     verified
Integration	• Primary responsibility for conducting tests	<ul> <li>Review test materials and results</li> <li>Make recommendation about readiness for Functional Test</li> <li>Review CM logs</li> <li>Review test mgmt activities, test activities, and test documentation for completeness, correct process, and adherence to processes and standards</li> </ul>	Verbal status via regular status meetings     Receive preparatory information on expectations and level of involvement in Functional Test	Receive preparatory information on expectations and level of involvement in Functional Test	<ul> <li>Review test activities and documentation for adherence to processes, standards, and for appropriate rigor</li> <li>Make recommendation about readiness for Functional Test</li> </ul>
Functional	Primary responsibility for conducting tests	Participate, observe or review test materials and results     Review CM logs     Review test mgmt activities, test activities, and test documentation for completeness, correct process, and adherence to processes and standards     Review requirements traceability analysis to ensure all requirements have been tested	None	Participate in the final iteration to verify readiness for User Acceptance	<ul> <li>Review test activities and documentation for adherence to processes, standards, and for appropriate rigor</li> <li>Review or perform requirements traceability analysis to ensure all requirements have been tested</li> </ul>
System Performance	• Primary responsibility for conducting tests	<ul> <li>Participate, observe or review test materials and results</li> <li>Review test mgmt activities, test activities, and test documentation for completeness, correct</li> </ul>	Receive verbal status on results/- conclusions	None	Review test activities and documentation for adherence to processes, standards, and for appropriate rigor

### Section 6 – Technical Requirements – Statement of Work (SOW)

TEST PHASE	CONTRACTOR	STATE PROJECT STAFF	SPONSOR	USER	IV&V
		process, and adherence to processes and standards • Review test results to ensure performance requirements have been met			
Stress Test	• Primary responsibility for conducting tests	<ul> <li>Participate, observe or review test materials and results</li> <li>Review test mgmt activities, test activities, and test documentation for completeness, correct process, and adherence to processes and standards</li> <li>Review test results to ensure performance requirements have been met</li> </ul>	Receive verbal status on results/- conclusions	None	Make recommendation about system scalability, growth and throughput
Regression	Primary responsibility for conducting tests	<ul> <li>Participate, observe or review test materials and results</li> <li>Review CM logs</li> <li>Review test mgmt activities, test activities, and test documentation for completeness, correct process, and adherence to processes and standards</li> <li>Review test results to ensure sufficient testing has been performed</li> </ul>	None	None	Review test activities and documentation for adherence to processes, standards, and for appropriate rigor
User Acceptance	<ul> <li>Prepare test</li> <li>Prepare and distribute preparatory materials regarding UAT to all participants, especially Sponsor and User</li> <li>Conduct tests</li> <li>Participate as needed</li> <li>Respond to test issues</li> <li>Participate in testing meetings</li> </ul>	<ul> <li>Conduct tests</li> <li>Participate, observe or review test materials and results</li> <li>Track UAT configuration and any changes due to fixes</li> <li>Coordinate testing efforts and report to stakeholders on status</li> <li>Review test mgmt activities, test activities, and test documentation for completeness, correct process, and adherence to processes and standards</li> <li>Oversee preparation and distribution of preparatory materials regarding UAT.</li> </ul>	• Execute tests and business workflows	Review test scenarios     Execute tests and business workflows	Review test activities and documentation for adherence to processes, standards, and for appropriate rigor     Make recommendation about readiness for system deployment

# 4.2.2 Test Planning and Deliverables

- 1. As part of the Project Master Plan (Paragraph 3.1.1), the Contractor shall develop, deliver, maintain, and execute a Test and Evaluation Master Plan (TEMP) that documents the overall test and evaluation strategy of the Project, including its structure and objectives, based on IEEE 829-1983, Standard for Software Test Documentation. The TEMP provides a framework within which to generate detailed test and evaluation plans, and it shall document high-level schedule, roles and responsibilities, and resource requirements associated with the test and evaluation function. The TEMP focuses on the overall structure, major elements, and objectives of the test and evaluation program.
- 2. The Contractor shall develop, deliver, maintain, and execute a System Test Plan in accordance with IEEE 12207.1, Paragraph 6.27, Test or Validation Plan. The System Test Plan shall provide a detailed description of each test required to ensure that all of the system, interfaces, and components comply with the requirements and specifications. The System Test Plan shall:
  - a. Define the test philosophy (including objectives, required levels or types of testing, and basic strategy).
  - b. Discuss the strategy to be used for creating and populating the test database and maintaining the files during the iterative testing.
  - c. Describe testing for the Project to include:
    - i) How the testing will satisfy specific objectives and demonstrate the requirements will be met
    - ii) What design modules will undergo control or data flow analysis
    - iii) How each phase of the testing is determined to be complete and the formal reports/debriefings conducted for each phase of the testing
    - iv) The testing facilities, environment and specific testing tools to be used
    - v) The processes and procedures that will be used by the Contractor for releasing testing results, data reduction and analysis, and review of test results.
  - d. Identify all planned levels of testing (at a minimum: unit, integration, functional, performance, stress, regression, user acceptance, and pilot operation), to include:
    - i) Facilities/tools to be used
    - ii) Staff/resources
    - iii) Method for review of test cases and procedures
    - iv) Configuration management
    - v) Procedures for releasing test results
    - vi) Test data refreshing.
  - e. Describe Final Acceptance Testing and User Sign-Off.
- 3. The Contractor shall develop, deliver, maintain, and execute a detailed System Test WPU to supplement the Master Work Plan as described Paragraph 3.1.2 with supplemental plans to include:
  - (a) Integration Test Phase WPU (to meet the requirements of Paragraph 4.2.4, Integration Testing)

- (b) Functional Test Phase WPU (to meet the requirements of Paragraph 4.2.5.1, Functional Testing)
- (c) System Performance Test WPU (to meet the requirements of Paragraph 4.2.5.2, System Performance Testing)
- (d) User Acceptance Test Phase WPU (to meet the requirements of Paragraph 4.2.5.4, User Acceptance Testing)
- (e) Pilot Operation Phase WPU (to meet the requirements of Paragraph 4.5.6, Pilot Operation)
- 4. For each phase of testing, the test files, test tools, specific versions/units and results shall be placed under Configuration Management as described in Paragraph 3.2.6, Configuration Management.
- 5. For each phase of testing the Contractor shall prepare and deliver the following documentation, as defined in Paragraph 4.2.3, Software Unit and Component Testing; Paragraph 4.2.4, Integration Testing; and Paragraph 4.2.5 System Qualification Testing:
  - a. Test Materials Packet
  - b. Functional-Requirements-to-Test Traceability Matrix
  - c. Test Results Packet
  - d. Contractor Certification of Successful Test Completion
- 6. The Test Materials Packet shall include, but not be limited to:
  - a. Test Cases, in accordance with IEEE 829-1983, Standard for Software Test Documentation, Paragraph 5, Test-Case Specification.
  - b. Test Procedures, in accordance with IEEE 12207.1, Paragraph 6.28, Test or Validation Procedures. In addition to all IEEE content, test scripts shall include, at a minimum:
    - i) Roles and responsibilities of both the Contractor and State personnel
    - ii) Application scripts and operating system scripts
    - iii) Constraints
    - iv) Initialization
    - v) Termination
    - vi) Actions to perform in case of error
    - vii) Data analysis procedures
    - viii) Interfaces exercised.
  - c. Automated Test Scripts (not required for unit test or integration test) in accordance with IEEE 12207.1-1997, Standard for Information Technology Software Life Cycle Processes Life Cycle Data, Paragraph 6.28, Test or Validation Procedures. These test scripts will be used in both quality and performance testing. Automated Test Scripts shall meet all criteria for Test procedures.
  - d. Test Data in accordance with IEEE 829-1983, Standard for Software Test Documentation.
- 7. The Contractor shall refine the test procedures and scripts throughout the life of the system to reflect the as-built design and current requirements.

- 8. The Functional-Requirements-to-Test Traceability Matrix shall verify requirements traceability to all testing activities.
- 9. The Test Results Packet shall include:
  - a. Transmittal Report based on IEEE 829-1983, Standard for Software Test Documentation, Paragraph 7, Test-Item Transmittal Report
  - b. Test Log based on IEEE 829-1983, Standard for Software Test Documentation, Paragraph 8, Test Log
  - c. Incident Report based on IEEE 829-1983, Standard for Software Test Documentation, Paragraph 9, Test-Incident Report
  - d. Summary Results Report based on IEEE 829-1983, Standard for Software Test Documentation, Paragraph 10, Test-Summary Report and IEEE 12207.1-1997, Standard for Information Technology Software Life Cycle Processes Life Cycle Data, Paragraph 6.29, Test or Validation Results Report. In addition to all IEEE content, the Summary Results Report shall include:
    - i) Identification of the items, features, and operations tested
    - ii) Summary of all features and operations tested and the test steps taken
    - iii) Summary of the results of testing for each operation and feature tested including any limitations of the testing strategy
    - iv) Variances from expected results, including recommendations for corrective action or alternative solutions for each variance noted
    - v) Comprehensive Assessment of Readiness for subsequent test phase or for Statewide Operation.
- 10. On completion of each testing phase, the contractor shall participate in reviews, in accordance with Paragraph 5.3.4.3, Milestone Reviews, with the State to establish that the system is ready for next test phase.

# 4.2.3 Software Unit and Component Testing

The Unit Test ensures the software units can compile and function in a test environment with simulated interaction with other software units. Unit testing also includes testing of small groups of modules that are functionally or logically related, verifying the interfaces between the related modules perform correctly, and verifying utility functions or modules work correctly when called by various modules.

- 1. The Contractor shall develop, deliver, and maintain the following documentation:
  - a. Unit Test Results Packet
  - b. Contractor Certification of Successful Unit Test Completion.
- 2. The Contractor shall test each software unit and database in accordance with the System Test Plan. The Contractor shall verify by code-inspection those items or paths that are not feasible to test. Unit testing shall include, but not be limited to:
  - a. Execution of every new or modified code path
  - b. Code inspection for critical items that do not have an observable outcome

- c. Screen and report formats verification
- d. Full range of values tested for data entry fields
- e. All error cases verified and required to end gracefully with the appropriate error data reported
- f. All return values verified to ensure they are correctly generated under the correct circumstances
- g. Units "clean up" after themselves, releasing any system resources, as appropriate
- h. Verify the correct passing and setting of parameters as they pass between modules
- i. Verify that the design is correctly implemented
- j. Verify functional outputs or module exit values
- k. Verify adherence to Software Engineering Standards.

### 4.2.4 Integration Testing

The Contractor combines software units into their functional components and conducts the Integration Testing in an environment that simulates the production environment with scripted data and business scenarios inputs and interfaces to ensure consistent test results.

- 1. The Contractor shall develop, deliver, and maintain the following documentation:
  - a. Integration Test Materials Packet
  - b. Integration Test/Functional Requirements Traceability Matrix
  - c. Integration Test Results Packet
  - d. Contractor Certification of Successful Integration Test Completion
- 2. The Contractor shall test the software in accordance with the System Test Plan. Integration Testing shall include, but not be limited to:
  - a. The verification of each functional area and inter-functional interfaces
  - b. All requirements verified, and all testable requirements verified
  - c. Hardware specifications and COTS software components verified for correctness and compliance with specifications
  - d. External interfaces verified
- 3. On completion of integration testing the contractor shall participate in an Integration Test Review, in accordance with Paragraph 5.3.4.3, Milestone Reviews, with the State to establish that the system is ready for Functional Testing.

# 4.2.5 System Qualification Testing

System Qualification Testing is to ensure the system meets the requirements and includes:

- Functional Testing
- System Performance Testing
- Stress Testing

- Regression Testing
- User Acceptance Testing

### 4.2.5.1 Functional Testing

- 1. For functional testing, the Contractor shall provide a test environment that contains all the components and functionality of the production environment for testing new application releases or modifications.
- 2. The Contractor shall develop, deliver, and maintain the following documentation:
  - a. Functional Test Materials Packet
  - b. Functional Test/Functional Requirements Traceability Matrix
  - c. Functional Test Results Packet
  - d. Contractor Certification of Successful Functional Test Completion
- 3. The Contractor shall test the software in accordance with the System Test Plan. The Contractor shall test the application in an operational environment that simulates the production environment, to include using actual data and IHSS/PCSP business scenarios.
- 4. The Contractor shall provide a testing team operationally distinct from the development team that performs System and Regression testing for each application maintenance release according to the TEMP and System Test Plan.
- 5. Functional testing shall include, but not be limited to:
  - a. Verify that all planned tests are executed at least once
  - b. Verify end-to-end workflows and scenarios
  - c. Verify all external interfaces
  - d. Final verification of all requirements and design
  - e. Verify any non-testable items
  - f. Verify help files and training materials.
- 6. The Functional Testing completion criteria shall include, but not be limited to:
  - a. Demonstration of successful execution of all test scripts
  - b. Demonstration that the system is stable within the test environment
  - c. Demonstration that the appropriate level of Configuration Management has been applied to all impacted Configurable Items.
- 7. The Contractor shall maintain the automated test tool and automated scripts under configuration management control for the lifetime of the Contract. The Contractor shall provide access including but not limited to the State and counties for testing.
- 8. The Contractor and State shall perform a Functional Test Review including performance and stress test review in accordance with Paragraph 5.3.4.3, Milestone Reviews.

# 4.2.5.2 System Performance Testing

- 1. The Contractor shall test the potential resource and performance impact of new software releases in a testing environment that mirrors the performance of the production environment. The Contractor shall measure and establish baseline system performance metrics. The Contractor shall test application and hardware updates to ensure there is no unacceptable degradation in performance introduced by the system changes by measuring the new system performance against baseline performance metrics.
- 2. For each type of performance testing online, batch and stress, the Contractor shall prepare and deliver;
  - a. Test Materials Packet
  - b. Test Results Packet
  - c. Contractor Certification of Successful Test Completion

As defined in Paragraph 4.2.2, Test Planning and Deliverables

- 3. If overall performance of the system degrades by more than ten (10) percent from established average baseline system performance metrics between releases, the Contractor shall perform a Stress Test in accordance with Paragraph 4.2.5.2.3, System Stress Testing, and prove to the satisfaction of the State that the production environment has the capacity to meet the performance requirements.
- 4. The Contractor shall collect and report metrics during the performance tests including, but not limited to:
  - a. System resource utilization (CPU, Disk, Memory and Network) on all the enterprise system and test workstations
  - b. System and User Response times as defined in Section 6, SyRS, Paragraph 9, System Performance for individual functions
  - c. Length of time each function spends in each component of the system Client, network, and server.

### **4.2.5.2.1** Online Performance Testing

- 1. The Contractor shall conduct performance testing prior to each scheduled release. The online performance test shall use no less than fifty (50) of the most frequently used user functions in the form of automated scripts, which generate the test data required internally to alleviate the need to retain specific data sets. The online test shall run for a minimum of one (1) hour excluding any ramp up/down periods.
- 2. For each performance test, the Contractor shall deliver;
  - a. Online Performance Test Materials Packet
  - b. Online Performance Test Results Packet
  - c. Contractor Certification of Online Performance Successful Test Completion
- 3. The Online Performance Test Results Packet shall include, but not be limited to:

- a. Detailed results of two (2) baseline tests on the current application software that have response time and system resource metrics results within two (2) percent of each other
- b. Explanation of any overall or individual function metric difference between the previous scheduled release and current application performance tests where the average user response time or the number of successful transactions deviates more than five (5) percent from the average of the baseline
- c. Detailed results of two (2) baseline tests on the scheduled release application software that have results within two (2) percent of each other
- d. A detailed comparison of the system resources utilized in each test and an explanation when the individual resource utilization deviates more than five (5) percent from the average of the baseline
- e. Confirmation that the scheduled release will meet performance requirements.

#### 4.2.5.2.2 Batch Performance Testing

Batch processing cycle(s) will require similar testing to online testing.

- 1. The Contractor shall perform performance testing on each type of cycle including, but not limited to, daily, monthly, quarterly and annual. Each test shall use a representative data set for the tasks involved in the batch cycle, e.g., a daily batch cycle test shall include all the work expected to be outstanding at the end of a normal business day.
- 2. For each performance test the Contractor shall deliver;
  - a. Batch Performance Test Materials Packet
  - b. Batch Performance Test Results Packet
  - c. Contractor Certification of Successful Batch Performance Test Completion
- 3. The Batch Performance Test Results Packet shall include, but not be limited to:
  - a. Detailed results of two (2) baseline tests on the current application software that have runtimes and system metrics results within two (2) percent of each other
  - b. Explanation of any overall or individual function metric difference between the previous scheduled release and current application performance tests where the average runtime deviates more than five (5) percent from the average of the baseline
  - c. Detailed results of two (2) baseline tests on the scheduled release application software that have results within two (2) percent of each other
  - d. A detailed comparison of the system resources utilized in each test and an explanation when the individual resource utilization deviates more than five (5) percent from the average of the baseline
  - e. Confirmation that the scheduled release will meet performance requirements.

#### 4.2.5.2.3 System Stress Testing

- 1. Prior to the application going live, the Contractor shall develop and deliver
  - a. Stress Test Materials Packet
  - b. Stress Test Results Packet

#### c. Contractor Certification of Successful Stress Test Completion

- 2. The Stress Test shall ensure that the system can maintain performance requirements when under peak usage. If approved by the State Project Manager, the Contractor shall execute the Stress Test and report the results to the State in a Stress Test Results Packet based on IEEE 829-1983, Standard for Software Test Documentation, Paragraph 7, Test-Item Transmittal Report and IEEE 829-1983, Standard for Software Test Documentation, Paragraph 9, Test-Incident Report. At minimum the tests shall prove that:
  - a. The system shall have the ability to support the full-anticipated user community working under normal conditions while meeting the performance requirements defined Section 6, SyRS, Paragraph 9, Performance.
  - b. Any batch processing cycle will not impede system availability and online performance requirements.
  - c. That performance metrics can be met over the Wide Area Network (WAN) connectivity specified.
  - d. There is reasonable system capacity available for peak processing periods.
  - e. There are no previously undiscovered system errors, such as memory leaks, that would only be detected under load testing.

### 4.2.5.3 Regression Testing

- 1. The Contractor shall repeat the regression test cycle for each incremental development effort and conduct regression testing to ensure that any new components did not cause problems in previously implemented functionality. When modifications are made to previously tested software, the Contractor shall conduct regression testing, in accordance with the System Test Plan, to ensure the modification did not introduce any errors or degrade system performance.
- 2. Regression Testing shall include, but not be limited to:
  - a. Verification that other areas of the system and database have not been affected negatively or unexpectedly by changes
  - b. Execution of tests in areas which are not directly related to the area being changed, to ensure they still perform as expected
  - c. Comparison of results from previous releases to current test results.
- 3. The Contractor shall develop, deliver, and maintain the following documentation:
  - a. Regression Test Materials Packet
  - b. Regression Test/Functional Requirements Traceability Matrix
  - c. Regression Test Results Packet
  - d. Contractor Certification of Successful Regression Test Completion, including State approvals.
- 4. The Contractor shall maintain and keep under configuration management all regression test cases. Test cases shall be annotated for application, assumptions, initial conditions, and expected results.
- 5. The Regression Testing completion criteria shall include, but not be limited to:

- a. Demonstration of successful execution of all test scripts
- b. Demonstration that the system is stable within the test environment
- c. Demonstration that the appropriate level of Configuration Management has been applied to all impacted Configurable Items.

### 4.2.5.4 User Acceptance Testing

- 1. The Contractor shall validate that all requirements of the baselined system requirements are verified through User Acceptance Testing.
- 2. The Contractor shall participate in User Acceptance Testing (UAT) on all software, including software initially installed, improved versions (new releases) of the software, and any software which has been modified by the Contractor to satisfy the State's requirements.
- 3. The UAT shall include:
  - a. Detailed test scripts developed by the Contractor
    - i) The test scripts shall cover all facets of the system's operations and test all of the system processing options and environmental conditions
    - ii) Tests shall consist of batch/online interface processing; transaction processing; system security, edits, and controls; backup and recovery; error processing; and system reporting
    - iii) The test scripts shall ensure all system reports and forms, including daily, monthly, quarterly, and annual are generated for review.
  - b. Detailed test scripts developed by the State and/or users
    - i) The test scripts shall cover workflow and functional processes as determined by the State, counties, and other users.
  - c. Ad hoc testing by the State and county representatives to provide the opportunity to include various transactions and sequences that may not have been included in the test scripts to challenge the system's operation and design.
- 4. The Contractor shall develop, deliver, and maintain the following documentation:
  - a. User Acceptance Test Materials Packet
  - b. User Acceptance Test/Functional Requirements Traceability Matrix
  - c. User Acceptance Test Results Packet
- 5. The Contractor shall establish, subject to the approval of the State, pass-fail criteria as part of the TEMP.
- 6. A complete end-to-end test of the system shall be performed without failure before the acceptance testing will be considered completed. If the UAT fails, the Contractor shall correct any areas that do not pass acceptance testing and retest all related and affected areas of the system retested, as determined by the State.
- 7. The Contractor shall support State execution of a thorough Acceptance Test. This test will verify that the application is functioning as required in this Contract for all users statewide. The Contractor shall provide the following in support of Acceptance Testing:

- a. Production-like test environment/region
- b. Facilities and equipment to support testers
- c. Brief test environment training (up to four [4] hours) for testers
- d. Technical consultation for the duration of Acceptance Testing
- e. System support for the Acceptance Testing environment
- f. Remote access for the Acceptance Testing environment/region from any county (including technical support for configuration of county remote workstations to access the testing environment).
- 8. The Contractor shall maintain sufficient test environments to support functional, performance, and user acceptance testing concurrently. All test environments shall be separate and independent of the production environment and shall fully support the requirements of the testing performed. To the extent possible, test cases shall be able to be created, maintained, and refreshed without technical support. The Contractor shall certify in writing to the State when the software is installed and ready for use.
- 9. On completion of User Acceptance Testing the contractor shall participate in a User Acceptance Test Review, in accordance with Paragraph 5.3.4.3, Milestone Reviews, with the State to establish that the system is ready for Pilot Operation
- 10. User Acceptance Testing shall be performed on the test system co-located with the production server.

#### 4.2.6 Release Readiness Review

- 1. At least two (2) business days prior to release of any configurable item into the production environment the Contractor shall participate in a Release Readiness Review. The review shall ensure that all required deliverables are up to date, under configuration management and baselined. The Contractor shall certify that all deliverables defined in Section 7, DELIVERABLE LIST are ready for implementation and meet the requirements of the State.
- 2. The Contractor must obtain State approval of the Release Readiness Review prior to any release into the production environment, effectively a final Go/No Go decision.
- 3. The deliverables for the Release Readiness Review shall include, but are not limited to:
  - a. Release Installation Procedures to include a description of how the production environment will be upgraded
  - b. Post Installation Verification Test Plan to ensure that the software was successfully installed and will operate
  - c. Release Back-Out Plan detailing the strategies and tasks required to restore the system to the prior release in the case of release verification failure.
  - d. CMIPS II Source code
  - e. CMIPS II production application
  - f. All other deliverables, as defined in Section 7, DELIVERABLE LIST, that are due for each release
  - g. FPCA Report as described in Paragraph 3.2.6, Configuration Management.

4. As part of the Release Readiness Review the Contractor shall ensure that the system infrastructure and their support teams including HHSDC Data Center systems and WAN are ready to accept the release.

### 4.2.7 System Test and Evaluation Reporting and Metrics

- 1. The Contractor shall report the status of Test and Evaluation as part of the Monthly Project Status Report. The Contractor shall report test and evaluation metrics for each testing phase to include:
  - a. Test Coverage
    - i) Percentage and number of requirements tested
    - ii) Number of test cases per requirement planned and executed
  - b. Test Cases
    - i) Number Executed to Date vs. Total planned
    - ii) Number of Re-tests to date
    - iii) Number of unplanned test cases required
  - c. Ratio of failed tests to total tests executed
    - i) On original tests, categorized by severity
    - ii) On re-tests, categorized by severity
    - iii) Number of issues generated
  - d. Test Completeness
    - i) Percentage of planned tests passed successfully
  - e. Reason for failed tests
  - f. Defect metrics as defined in Paragraph 5.3.5, Quality reporting and Metrics.

# 4.3 System Maintenance and Enhancements

# 4.3.1 System Maintenance and Enhancement Overview

The purpose of system maintenance and enhancements is to ensure CMIPS II is properly updated in response to system defects and enhancements. The process has sufficient controls to avoid system defects, minimize disruption to the IHSS/PCSP Program, and to stay within the annual contract appropriation. The following list provides a high-level overview of the process:

- 1. The annual contract appropriation for all system modifications will be established as described in Paragraph 3, Project Management, and monitored as defined in Paragraph 3.2.1.1, Tracking DDI Activities.
- 2. Potential system changes will be identified through the Issue Management process defined in Paragraph 3.2.4; Issue Management, will be managed by the Change Management process in Paragraph 3.2.5, Change Management; and will be approved by the Project Change Management Board (PCMB) as defined in Paragraph 3.2.5, Change Management.

- 3. The Contractor shall prepare and deliver to the PCMB a System Service Request that includes a detailed change description, impact analysis and cost estimate. The Contractor must obtain PCMB approval of the funding for that request through a Work Authorization as defined in Section 11, MODEL CONTRACT, Section 4.4, Work Authorization, prior to continuing work on the change.
- 4. The Configuration Control Board (CCB), as defined in Paragraph 3.2.6, will group the modifications in software "Maintenance Releases" using the System Service Requests as described in Paragraph 4.3.5, Release Management. The Contractor must obtain approval for composition of each release as defined in Paragraph 4.3.5, Release Management, prior to development.
- 5. The Contractor shall develop the modifications and combine them into the Maintenance Release using a scaled-down version of the initial DDI process to include the same standards for planning/initiation, requirements, definition, design, code, testing, and implementation. The modifications shall be documented and tracked through a Modification Record as defined in Paragraph 4.3.3, Modification Management.
- 6. The Contractor must obtain approval from the CCB and PCMB for the Maintenance Release before it is put into the production environment as defined in Paragraph 4.2.6, Release Readiness Review.
- 7. The CCB will audit the production release to verify the as-built functionality and configuration meet the requirements in the System Service Request.
- 8. Based on the CCB audit, the PCMB may approve payment. See Section 11, MODEL CONTRACT, Section 4, Financial Matters.

### 4.3.2 Project Maintenance Planning

- 1. The Contractor shall develop, deliver, maintain, and execute a Project Maintenance Plan that meets the standards of IEEE 12207, Paragraph 5.5, Maintenance Process and IEEE 1219-1998, Standard for Software Maintenance and IEEE 1042-1987, Standard for Software Configuration Management. The maintenance process shall address modifications to the CMIPS II application and also supporting hardware and COTS software.
- 2. The Project Maintenance Plan shall be reviewed at least annually by the Contractor and updated as needed.

# 4.3.3 Modification Management

The Contractor will be responsible for implementing all modifications to the CMIPS II application.

- 1. For system changes that have been initially approved by the PCMB as described in Paragraph 3.2.5, Change Management, the Contractor shall create a System Service Request to identify, classify, and assign an initial priority ranking for release in accordance with IEEE 1219, Paragraph 4.1, Problem/Modification Identification, Classification, and Prioritization.
  - a. The System Service Request identification shall define the scope of the modification.

- b. The System Service Request impact analysis shall include an implementation priority, preliminary plan and schedule for design, development, test, and implementation in accordance with Paragraph 4.1.2, System Requirement Validation and IEEE 1219, Paragraph 4.2, Analysis.
- c. The System Service Request impact analysis shall have an estimate for the number of hours and cost required to perform the modification.
- d. The System Service Request effort estimate shall include the job classification of the personnel to be made available by Contractor.
- e. The System Service Request modification analysis shall also identify deliverables to include updates to all related deliverables such as documentation.
- f. The System Service Request modification analysis shall include the proposed Acceptance Criteria for the work to be performed.
- g. The Contractor shall ensure that any System Service Request is traced to both the relevant defined requirements and to all affected configured items.
- h. The Contractor shall perform the analysis and complete a System Service Request within ten (10) business days of receipt of the approved change, or such longer time agreed to in writing by the State Project Manager.
- 2. The PCMB reviews all System Service Requests for approval or denial.
  - a. The State issues a Work Authorization only for approved modifications. See Section 11, MODEL CONTRACT, Section 4.4, Work Authorization.
  - b. The Contractor shall close all System Service Requests that are not approved through the Issue Management Process as described in Paragraph 3.2.4, Issue Management.
- 3. For a System Service Request with a Work Authorization, the Contractor shall use a Modification Record to document the results for each modification as it proceeds through the phases of analysis, design, coding, test, and implementation.
- 4. The Contractor shall monitor and track all System Service Requests and Modification Records through resolution.

#### 4.3.4 Defect Corrections

1. The Contractor shall use all commercially reasonable efforts to provide solutions, changes, and corrections to system defects within the correction periods based on the severity in Table 13.

**Table 13. Defect Correction Periods** 

SEVERITY	DEFECT CORRECTION PERIOD
Priority 1*	Within five (5) days through an Exception Release

SEVERITY	DEFECT CORRECTION PERIOD
Priority 2*	In the next monthly release
Priority 3*	Within the next two monthly releases
Priority 4*	Within the next six monthly releases
Priority 5*	Within a schedule to be mutually agreed upon

\*Defined in Paragraph 3.2.4, Issue Management

- 2. The correction period shall commence upon approval of the defect priority by the State Project Manager as defined in Paragraph 3.2.4. The State Project Manager may modify the time-to-fix period, if in his or her sole judgment it is in the best interest of the Project.
- 3. The Contractor shall track all defects through resolution.
- 4. The Contractor shall monitor and report the status of defect corrections as defined in Paragraph 5.3.5, Quality Reporting and Metrics.

### 4.3.5 Release Management

Modifications will be grouped and implemented in scheduled Maintenance Releases subject to PCMB and CCB approval. The CMIPS Project has a capped dollar amount for modifications each year.

- 1. The Contractor shall recommend modification groupings to the CCB that address the priority business needs and contract constraints. The Contractor's release recommendation shall include an hour and dollar estimate for each modification from each System Service Request as well as a total hour and dollar estimate for the entire release. The CCB considers approval of the content and recommended release date for Maintenance Release. Then the PCMB considers approval of the cost and schedule. The Contractor shall not continue work on the Maintenance Release without the CCB and PCMB approvals.
- 2. CMIPS II shall have both scheduled quarterly and monthly maintenance releases, the exact date of which will be adjustable to facilitate special processing, holidays, etc. The quarterly releases shall include major and moderate system changes while the monthly releases shall include only minor changes.
  - a. A major change reflects a significant change in business requirements caused, for example, by new legislation or change in IHSS policy.
  - b. Moderate changes are for refinements in IHSS business requirements and/or significant problem resolution.
  - c. Minor changes can be an enhancement to provide minor problem resolution or improvements to procedures such that the changes do not require updates to User documentation, Training, Data Conversion, or LDD modification.
- 3. In addition, the Contractor may execute "emergency" updates to CMIPS II as an "exception release" outside of the scheduled releases if approved in writing by the State Project

Manager. Exception releases are to correct errors that have a Priority 1 impact to the IHSS/PCSP Program and cannot wait until the next scheduled release.

4. The Contractor shall obtain CCB and PCMB approval for each Maintenance Release.

### 4.3.5.1 Release Management Planning

- 1. The Contractor shall develop, deliver, maintain, and execute a Release Management Plan that will look forward at least six (6) months. The Release Management Plan shall include:
  - a. Identification of the modifications to be included in each release
  - b. Justification for the grouping
  - c. Estimates for each release must include effort, cost, staffing summary, and schedule summary
  - d. Identification of applicable processes/activities for each release that meet the requirements for development (Paragraph 4.1), testing (Paragraph 4.2), and implementation (Paragraph 4.5) based on tailoring guidelines of Paragraph 4.3.5.2, General Maintenance Release Life Cycle Tailoring
  - e. Identification of applicable deliverables for each release that meet the requirements of System Development (Paragraph 4.1), Testing (Paragraph 4.2), and Implementation (Paragraph 4.5)
  - f. In the Release Management Plan, the identification of any major activities that the Contractor expects to be completed and the resources required, e.g., Contractor, State and county staff
  - g. Approval by the PCMB of the Release Management Plan each quarter.
- 2. If the PCMB approves a Maintenance Release, the Contractor shall develop, deliver, maintain, and execute a Release Management WPU for the Maintenance Release to include applicable activities for the System Development (Paragraph 3.1.2), Testing (Paragraph 4.2) and Implementation (Paragraph 4.5). Within one (1) week of the Release Cycle start date; the Contractor shall participate in a Release Initiation and Planning Meeting to present the Release Management WPU to the State staff. The Contractor shall obtain State approval prior to beginning work defined in the Release Management WPU. Once initiated, the Contactor shall update the Release Management WPU weekly with actual work performed and present a summary of the Work Plan status at the weekly project status meeting.

# 4.3.5.2 General Maintenance Release Life Cycle Tailoring

The State recognizes that the level of detail required for each of these processes will vary depending on the size and complexity of the modifications included in a release. Consequently, the Contractor may tailor the processes identified in preparing a release with the written approval of the State Project Manager. The extent of the tailoring will be dependent upon the applicability of the process, on the size and complexity of changes to the System Configurable Items, and the risks associated with implementation as described in the following paragraphs.

1. The Contractor shall develop a Modification Design in accordance Paragraph 4.1.4, General System Design, Paragraph 4.1.5, Detailed System Design, and with IEEE 1219, Paragraph

- 4.3, Design. The Contractor shall summarize the modification design description in the Modification Record.
- 2. Modification to all related, affected system configuration items shall be performed in accordance with Paragraph 4.1.6, Coding and Documentation, and Paragraph 5.2, Documentation Management. The Contractor shall summarize the actual code and document modifications in the Modification Record.
- 3. The Contractor shall test each change as described in Paragraph 4.2, System Test and Evaluation. The Contractor shall summarize the test results in the Modification Record.
- 4. The Contractor shall obtain approval from the PCMB for implementation of the software and related work products into the production environment. The Contractor shall implement the software and related work products in accordance with Paragraph 4.5, Statewide Implementation.
- 5. The Contractor shall summarize the implementation activities and results in the Modification Record.

### 4.3.5.3 Quarterly Release Tailoring

For quarterly Maintenance Releases with major, complex, and high impact modifications Contractor shall complete the full life cycle process described in Technical Processes (Paragraph 4). However, for quarterly releases with smaller, less complex modifications, the Contractor may tailor or simplify, with the State's written approval, the release processes into five (5) phases:

- Release Planning Phase
- Release Analysis and Design Phase
- Release Development Phase
- Test and Implementation Preparation Phase
- Release Implementation Phase
- 1. <u>Release Planning Phase</u>. Release Planning may be tailored to combine the milestones for project initiation and planning for each of the other life cycle phases with approval from the State Project Manager.
  - a. The Contractor shall develop, deliver, maintain, and execute the Release Management Plan and Release Management WPU as described in Paragraph 4.3.5.1, Release Management Planning.
  - b. The Contractor shall prepare, deliver, and execute supplemental release plans that meet the requirements of:
    - i) System Test Plan (Paragraph 4.2.2)
    - ii) Statewide Implementation Plan (Paragraph 4.5.2)
    - iii) Training Plan (Paragraph 4.5.4.4.1)
  - c. As applicable and requested by the State, the Contractor shall prepare, deliver and execute supplemental release plans for quarterly releases that meet the requirements of:
    - i) Project Staffing Plan (Paragraph 3.2.2.1)
    - ii) Operations Plan (Paragraph 4.4.1)

- iii) Capacity Management Plan (Paragraph 4.4.3)
- iv) Data Cleanup Plan (Paragraph 4.5.4.1)
- v) Data Conversion Plan (Paragraph 4.5.4.2)
- vi) Business Change Management Plan (Paragraph 4.5.3.1)
- vii) Quality Assurance Plan (Paragraph 5.3.1, Project Assurance)
- d. The Contractor shall develop, deliver, maintain, and execute supplemental release work plan updates that meet the requirement of:
  - i) Coding and Documentation WPU (Paragraph 4.1.1, System Development Planning)
  - ii) System Test WPU (Paragraph 4.2.2, Test Planning and Deliverables)
  - iii) Statewide Implementation WPU (Paragraph 4.5.2, Statewide Implementation Planning)
  - iv) Training WPU (Paragraph 4.5.4.4.1, Training Planning)
- e. As applicable and requested in writing by the State, the Contractor shall prepare, deliver and execute supplemental release work plans for quarterly releases that meet the requirements of:
  - i) System Requirement Validation WPU (Paragraph 4.1.1, System Development Planning)
  - ii) General System Design WPU (Paragraph 4.1.1, System Development Planning)
  - iii) Detailed System Design WPU (Paragraph 4.1.1, System Development Planning)
  - iv) Statewide Site Preparation WPU (Paragraph 4.5.4.3, Site Preparation)
  - v) Data Cleanup WPU (Paragraph 4.5.4.1, Data Cleanup)
  - vi) Data Conversion WPU (Paragraph 4.5.4.2, Data Conversion)
  - vii) Business Services Migration WPU (Paragraph 4.5.9, Business Services Migration)
  - viii) County Deployment WPU (Paragraph 4.5.7.1, County Deployment Planning)
  - ix) Release Management WPU (Paragraph 4.3.5.1, Release Management Planning)
- f. The Contactor shall present the Release Management Plan, Release Management WPU, and supplemental plans to the State staff for potential approval at a Release Initiation and Planning Meeting.
- 2. <u>Release Analysis and Design Phase</u>. The Contractor, with the State's written approval, may tailor modifications, requirements validation and design to applicable processes and deliverables and combine the System Requirements Validation (Paragraph 4.1.2), General System Design Review (Paragraph 4.1.4), and Detailed System Design Review (Paragraph 4.1.5) into one Release Analysis and Design Review.
- 3. <u>Release Development Phase</u>. The Contractor, with the State's approval, may tailor modification development to applicable processes and deliverables and combine the Component Coding and Documentation Review (Paragraph 4.1.6) and Test Readiness Review (Paragraph 4.2.2, Test Planning and Deliverables) into one (1) Modification Development and Test Readiness Review.

- 4. <u>Release Test and Implementation Preparation Phase</u>. The Contractor, with the State's prior written approval, may tailor release testing and implementation preparation activities to applicable processes and deliverables.
  - a. For testing requirements in Paragraph 4.2, System Test and Evaluation, the Contractor may, with the States prior written approval:
    - i) Limit the scope of User Acceptance Testing.
  - b. The Contractor may conduct one Release Test Review and Release Readiness Review that combines the requirements of:
    - i) Integration Test Review (Paragraph 4.2.4)
    - ii) Functional Test Review (Paragraph 4.2.5.1)
    - iii) User Acceptance Test Review (Paragraph 4.2.5.4)
    - iv) Pilot Operation Review (Paragraph 4.5.6)
    - v) Release Readiness Review (Paragraph 4.2.6)
    - vi) Site Readiness Report and CDSS Site Readiness Report (Paragraph 4.5.7.3, County Onsite Support and Paragraph 4.5.8.3, CDSS Onsite Support).
- 5. <u>Release Implementation Phase</u>. The Contractor shall obtain written approval from the PCMB for the implementation into the production environment. The Contractor may tailor the release implementation activities to applicable processes and deliverables.
  - a. Implementation processes and deliverables may be approved at the Post Statewide Implementation Review (Paragraph 5.3.4.3, Milestone Reviews)
  - b. The Contractor shall present Lessons Learned and issues for the implementation at the weekly project status meeting within two (2) weeks of implementation completion.

# 4.3.5.4 Monthly Release Tailoring

For monthly Maintenance Releases that contain corrective fixes, performance fixes and some minor enhancements, the Contractor may combine, with prior written approval of the State Project Manager, the life cycle processes into three phases:

- Release Planning Phase
- Release Development Phase
- Release Implementation Phase
- 1. <u>Release Planning Phase.</u> The Contractor shall develop, deliver, maintain, and execute the <u>Release Management Plan</u> and <u>Release Management WPU</u> as described in Paragraph 4.3.5.1, Release Management Planning. For monthly releases, no supplemental plans are required.
- 2. Release Development Phase.
  - a. The Contractor, with prior written approval from the State, may tailor the processes defined in Paragraph 4.2, System Test and Evaluation to:
    - i) Limit tests to components modified for the release
    - ii) Exclude the need to perform Functional Tests and Stress Tests
    - iii) Limit the scope of any User Acceptance Testing

- b. The Contractor, with approval from the State, may tailor the System Development and Implementation Milestones defined in Paragraph 5.3.4.3, Milestone Reviews to one Release Readiness Review to be conducted as part of a CCB meeting.
- c. The CCB will consider approval of Release Readiness Milestone based on a Contractor quality assurance review of the Modification Records. For these monthly releases without formal development and test milestone reviews, the Contractor shall submit a Quality Assurance Monthly Release Report to the CCB verifying the development and test activities and deliverables defined in the Release Management Plan and Release Management WPU were successfully completed and properly documented in the Modification Record. The CCB will review the Quality Assurance Monthly Release Report to consider approval for the release into the production environment. The Contractor shall obtain prior written approval from the PCMB for the release into the production environment.
- 3. <u>Release Implementation Phase</u>. The Contractor shall monitor the implementation milestones and report the status at subsequent CCB meetings. The Contractor shall obtain prior written approval from the CCB and PCMB for the release into the production environment. Once implementation is complete, the State will conduct a Post Statewide Implementation Review (Paragraph 5.3.4.3, Milestone Reviews) by reviewing the implementation documentation of the Modification Record to ensure all requirements have been met.

## 4.3.5.5 Exception Release Tailoring

1. Software may be released outside a release cycle for "emergency" fixes as an exception release. Emergency fixes are defined as updates necessary to correct errors that have a severe adverse effect on the IHSS/PCSP Program. For exception releases, the Contractor may use a streamlined development and implementation process and may not update related documentation at the time of the exception release. However, the Contractor shall include a full implementation of emergency updates in the next scheduled release, to include all required document updates. For each emergency fix, the Contractor shall prepare and deliver an Exception Release Request summarizing the change, justification for change, and brief impact analysis in writing for potential approval by the State Project Manager. In addition the Contractor shall prepare a tailored Modification Record process for approval by the State.

# 4.3.5.6 Release Monitoring and Reporting

- After a release plan is initiated, the Contractor shall report the status of each release in the CCB and PCMB to include release milestone dates and summary of any issues, problems, or lessons learned.
- 2. The Contactor shall update the Release Management WPU weekly and present a summary at the weekly project status meeting.
- 3. The Contractor shall treat each release as a subproject with its own Earned Value metrics (Paragraph 3.2.1, Schedule and Cost Management). The Contractor shall compare and report the actual and estimated release costs and schedules by milestone. The Contractor shall calculate and report Earned Value metrics (Paragraph 3.2.1) for each release in the Monthly Project Status Report.

4. The Contractor shall monitor the accuracy of the modification and release planning estimates as part of the Process Improvement Process (Paragraph 5.5).

## 4.4 System Administration

The Contractor will provide services for the daily operation and administration of the CMIPS II application.

## 4.4.1 System Operation Planning

- 1. The Contractor shall support the system operation including the enterprise system, the forms architecture, the reporting architecture, the automated timesheet entry architecture, hardware, and software.
- 2. The Contractor shall develop, deliver, maintain, and execute a detailed Operations Plan that includes, but is not limited to:
  - a. Description of functions, tools, and methodology required to operate CMIPS II
  - b. Identification of resources including skill sets and number of staff required to successfully operate and support the system
  - c. Defining a schedule for operational tasks and batch processes
  - d. Processes and procedures to coordinate with interface partners
  - e. Defining hardware and software requirements for any specific task outside the normal operations requirements
  - f. Defining technical support requirements for database administration and data storage
  - g. Defining technical support requirements for all enterprise hardware and software and the forms architecture.
  - h. Identifying the roles and responsibilities of the Contractor, HHSDC, CDSS, and counties executing the Operations Plan.
- 3. In addition, the Contractor shall develop, deliver, and maintain an Operations Manual that will document, but not be limited to:
  - a. Processes and procedures for all tasks in the operations environment
  - b. Roles and Responsibilities for the operations, technical support, and help desk
  - c. Problem Management for all tasks in the environment
  - d. Outage Analysis
  - e. Contact lists for personnel requiring notification of problems in the environment
  - f. Escalation procedures for all tasks in the environment
  - g. Hardware and software inventories
  - h. Procedures for scheduled maintenance of the environment, e.g., database maintenance.
- 4. The Contractor shall review and update the Operations Plan and Operations Manual to keep them current with system design and IHSS/PCSP business requirements. The Contractor shall summarize operations activities and status in the Operations Management Report (Paragraph 4.4.10, System Administration Reporting and Metrics).

#### 4.4.2 Data Distribution

The Contractor shall develop, deliver, maintain and execute a Data Distribution Plan (DDP) that defines how the Contractor and HHSDC shall meet the requirements defined in Section 6, SyRS, Paragraph 7.9, External Interface Architecture, Paragraph 8.1.5, Data Distribution Security and Exhibit 6-1 Interfaces.

#### The DDP shall define:

- 1. With what systems CMIPS II interfaces
- 2. The media each interface uses
- 3. The frequency of each interface
- 4. The turnaround time for interfaces that are a request/response style
- 5. The data retention periods for interface files
- 6. How confidential interfaces will be secured, including maintenance and management procedures for a encryption keys or passwords
- 7. How each interface the interface architecture as a whole will be managed, monitored and maintained
- 8. Any constraints that an interface has
- 9. Processes and procedures for monitoring and reporting successful or unsuccessful completion
- 10. Processes and procedures for recovering from failed interfaces and successful preprocessing.

## 4.4.3 Capacity Planning and Management

The Contractor will be responsible for executing a Capacity Management Plan that ensures that system service levels continue to be met. For components of the architecture provided by other entities, e.g., Data Center and WAN, the Contractor will work closely with the maintenance organization, but the Contractor will still have primary responsibility for identification and resolution of any potential limitations and or restrictions that a component may have, e.g., bandwidth.

- 1. The Contractor shall develop, deliver, and maintain a Capacity Management Plan that details the current planned utilization of each CMIPS II hardware component, including but not limited to CPU, Memory, Disk, and network components. The Capacity Management Plan shall forecast utilization over the period stated below and, where limitations are forecast to be met, detail how capacity will be increased or utilization reduced.
- 2. The Capacity Management Plan shall document the approach, methodology and tools for capacity planning and any assumptions used in modeling the system capacity.
- 3. The Capacity Management Plan shall document and clearly describe how the system will be designed to meet the requirements defined in Section 6, SyRS, Paragraph 9, Performance and demonstrate how the Contractor's architecture will ensure the stated response times to users.

- 4. The Capacity Management Plan shall document the approach, methodology and tools for managing the system capacity.
  - a. The Capacity Management Plan shall describe the system monitoring methods and tools
  - b. The Capacity Management Plan shall contain a description of the data and the reports that will be produced to support capacity management.
  - c. The Capacity Management Plan shall clearly identify the roles and responsibilities of the Contractor, HHSDC, CDSS, and counties in monitoring and reporting.
- 5. The Capacity Management Plan shall be updated at least every six months throughout the contract.
- 6. The Capacity Management Plan shall consider and account for anticipated load upon complete implementation and increased resource requirements for both user and caseload growth for the next five (5) years of maintenance and operation. The plan shall, in addition, define how the requirements in Section 6, SyRS, Paragraph 7.1, Central System will be met
- 7. The Capacity Management Plan shall include resource requirements for all components of the enterprise architecture including, but not limited to, production servers, HHSDC WAN, local county WANs/LANs, and client workstations, and other components required in the solution, as defined in Section 6, SyRS.
- 8. To support HHSDC in capacity planning and costing of the WAN and the counties in preparing their LAN's, the Capacity Management Plan shall include, at a minimum, the following metrics:
  - a. The average and peak traffic generated online by a user
  - b. The average and peak traffic generated per county for batch-oriented traffic
  - c. The average and peak traffic generated per county for print traffic
  - d. Wide area bandwidth requirements for each site.
- 9. The Contractor shall execute the Capacity Management Plan with support from HHSDC.
- 10. The Contractor shall deliver to the State Project Manager a Capacity Management Report detailing available resources versus utilized resources each quarter.

## 4.4.4 Operations Management

- The Contractor shall monitor and manage the performance of CMIPS II, with the exception
  of any infrastructure and services provided by HHSDC. For these HHSDC specific services
  the Contractor shall provide performance oversight of HHSDC and will work with the State
  to resolve any issues that arise. As part of the Operations Plan, the Contractor shall describe
  the processes and techniques for performance monitoring and management that will be used
  by the Contractor and HHSDC in support of this Contract.
- 2. The Contractor shall execute the Operations Plan with support from HHSDC and summarize results in the Operations Management Report.

- 3. The Contractor shall monitor total system performance including components of the architecture provided by HHSDC. The Contractor shall provide immediate notification to the State Operations Manager if system performance service levels as defined in Section 6, SyRS, Paragraph 9.2.1, System Response Times are not met and provide appropriate technical resources to correct the issue.
- 4. The detailed performance data and the tools used to manipulate the data shall be available to the State on request within two (2) business days of the request.
- 5. The Contractor shall have the ability to track user response times on a client located outside HHSDC on the WAN. Upon the written request of the State, the Contractor shall collect user response time performance metrics and demonstrate that response time requirements are being met as specified in Section 6, SyRS. The metrics shall detail time spent in each component server, network and client to allow the State to exclude network times from user response time.
- 6. The contractor shall report the amount of downtime that occurred in the previous calendar month as part of the Monthly Project Status Report.

### 4.4.5 System Security

- 1. The Contractor shall develop, deliver, maintain and execute a System Security Plan to ensure the security of the system and the confidentiality of the data. The Contractor shall consider and evaluate potential security risks and propose measures that will minimize those risks.
- 2. The System Security Plan shall meet the requirements of Federal, State, and CDSS statutes, regulations and policy regarding system and data security and confidentiality. The plan shall be similar to the templates for a System Security Plan that can be found at websites for the National Institute for Health and also the Computer Security Division of the National Institute of Standards and Technology.
- 3. The System Security Plan shall describe mechanisms to include:
  - a. How data will be secured in all development and production systems to prevent unauthorized access.
  - b. The processes and procedures for securing and managing removable media.
  - c. The processes and procedures for destruction of data prior to disposal of media.
  - d. The processes and procedures for managing and auditing user system and application accounts and privileges including development and support personnel.
  - e. The processes and procedures for monitoring and reporting attempts at unauthorized access to the system and/or application. All security incidents will be reported to the State Project Manager in a Security Incident Report.
  - f. The processes and procedures for monitoring and reporting the disclosure of confidential information.
  - g. How the plan shall conform with ISO 17799

- 4. The System Security Plan shall clearly identify the roles and responsibilities of the Contractor, HHSDC, CDSS, and counties in executing the System Security Plan.
- 5. The Contractor shall perform system security according to the System Security Plan with support from HHSDC. The Contractor shall verify and validate system security processes as part of the Quality Assurance Program (Paragraph 5.3.3, Process Assurance).
- 6. The System Security Plan shall be evaluated and updated at least annually.
- 7. The Contractor shall support the Data Center audits to be conducted by CDSS IV&V at least annually.
- 8. The System Security Plan shall have provisions to ensure the Data Center can maintain the operating system at a minimum C2 rating under the Trusted Computer System Evaluation Criteria published by the NCSC (5200.28-STD). DEPARTMENT OF DEFENSE, TRUSTED COMPUTER SYSTEM EVALUATION CRITERIA, DOD 5200.28-STD, published by the National Computer Security Center (NCSC) or its equivalent under the Common Criteria Evaluation and Validation Scheme (CCEVS).
- 9. For platforms not located at HHSDC the System Security Plan shall include Security Vulnerability and Penetration testing.
- 10. Health Insurance Portability and Accountability Act (HIPAA) of 1996. To the extent and in the manner determined to be applicable by CDSS and DHS, CMIPS II shall be required to comply with HIPAA in cases where State law is not more stringent. The System Security Plan shall ensure compliance with the act and the following finalized regulations.

Standards for Electronic Transactions. (45 CFR Parts 160 and 162)

Standards for Privacy of Individually Identifiable Health Information. (45 CFR Parts 160 and 164)

Standards for Security (45 CFR Part 160,162 and 164)

The Contractor shall ensure that the State is in compliance with the following proposed rules when they are finalized, including:

National Standard Employer Identifier (45 CFR Part 142)

## 4.4.6 Backup and Recovery

1. The system operates under statutory timeline requirements set by Federal and State law to ensure that no undue hardship is imposed on the population of Recipients and Providers. The Contractor shall develop, deliver, and maintain a Backup and Recovery Plan that describes in detail the processes and procedures to satisfy the following requirements in both production and non-production environments for CMIPS II which includes systems hosted by the Contractor and HHSDC.

- a. All data files shall be backed up on a regular schedule. Non-critical files, i.e. files without which users can still support the business, shall be recoverable to the end of the prior business day at a minimum. Critical files shall be journalized to allow restoration up to the last committed transaction.
- b. All system maintained files shall be backed up where required to permit recovery to the end of the prior business day. These will include, but are not limited to, user definition files, operating system files, and software setup files, etc.
- 2. Backup and recovery procedures shall be developed and published as part of the Operations Plan.
  - a. The backup and recovery procedures shall include all data stored within the enterprise environment including, but not limited to, print and report files generated by the application. Data stored on user workstations will not be the responsibility of the Contractor.
  - b. The procedures shall be updated to be current for each recovery test.
  - c. The recovery procedures shall include how the data files will be synchronized to a point in time relating to journalized files and non-journalized files.
  - d. In cases where files are not backed up, e.g., operating system files or application executables, the recovery procedures shall define how these files are reinstated to the system.
- 3. Prior to Pilot Operation, the Contractor, with support from HHSDC, shall successfully test and publish the results of the recovery procedures. Success is defined as recovering the system from major storage failure to the latest committed transaction without data loss.
- 4. The Contractor, with support from HHSDC, shall successfully test the backup and recovery procedures by recovering the production environment to an alternate system on a quarterly schedule. The results, including the length of time required to fully recover the system operationally, shall be recorded and submitted in writing to the State Operations Manager within two (2) business days of the test.
- 5. The Contractor, with support from HHSDC, shall fully recover the application to the point where users can resume work in no longer than six (6) hours. The Contractor shall check critical data files, e.g., databases, for corruption and data integrity prior to being backed up.
- 6. The Contractor shall document and maintain the backup schedule including incremental and full backup schedules with retention required.
- 7. The Contractor shall coordinate all backup off-site data storage. Any data stored outside the normal operating environment shall be secured to prevent unauthorized access and shall comply with Federal and State security and privacy regulations.
- 8. The Contractor shall clearly identify the roles and responsibilities of the Contractor, HHSDC, CDSS, and counties in executing the Backup and Recovery Plan.
- 9. The Contractor shall review the Backup and Recovery Plan at least annually and update as needed.

- 10. The Contractor, with support from HHSDC, shall execute the Backup and Recovery Plan as needed and authorized by the State.
- 11. The Contractor shall check each backup to ensure it was successful.
- 12. The Contractor shall monitor and report on Backup and Recovery Plan. The Contractor shall verify and validate backup and recovery processes as part of the Quality Assurance Program (Paragraph 5.3.3, Process Assurance). The CDSS IV&V will conduct onsite backup and recovery audits at least annually.

#### 4.4.7 Data Archive

- 1. The Contractor shall develop, deliver, maintain and execute a Data Archive Plan to meet the requirements defined in Section 6, SyRS, Paragraph 7.12, Data Retention/Archive.
- 2. Data archiving shall be executed by the Contractor with support from HHSDC according to responsibilities defined in the Data Archive Plan.
- 3. The Data Archive Plan shall allow the effective archiving of data from the production system while maintaining system performance and availability requirements.
- 4. Data archived to removable media for long-term storage shall be stored in a non-proprietary format.
  - a. The Contractor shall securely store all data archived to removable media.
- 5. If archived data is on a medium that is retired from use at HHSDC, the Contractor shall migrate the data to an alternate supported medium.

## 4.4.8 Disaster Recovery

The Contractor is responsible for planning Disaster Recovery that will be executed by HHSDC with support from the Contractor Disaster recovery is the loss of the enterprise processing facility, e.g., loss of the system function due to a major catastrophe such as fire, earthquake, explosion, or flood. Successful recovery assumes that the system and application are available and that the users can perform the same business activities as before the disaster.

- 1. The Contractor shall develop, deliver, and maintain a Disaster Recovery Plan (DRP) to document how, upon complete loss of the enterprise environment, the operational application functions can be successfully recovered to the end of business on the prior business day within three (3) days, and non-critical application functions within five (5) days of the disaster.
- 2. The Contractor will include in the Disaster Recover Plan the use of HHSDC provided facility, hardware, network, and personnel.
- 3. The Contractor shall coordinate the Disaster Recovery Plan with all entities involved in the execution of the DRP.
- 4. The Contractor shall coordinate the Disaster Recovery Plan with CMIPS Project Office and CDSS APB.

- 5. The Contractor, in coordination with HHSDC, shall conduct a successful DRP test prior to Pilot Operation and at least bi-annually thereafter. The DRP Results shall be delivered within ten (10) business days of testing.
- 6. The Disaster Recovery Plan shall be updated and published prior to each DRP test.
- 7. In the event of a disaster the Contractor shall support HHSDC in executing the Disaster Recovery Plan with prior approval from the State Project Manager.

### 4.4.9 Customer Service/Help Desk

- 1. The Contractor shall develop, deliver, maintain and execute a Customer Service Plan, which defines the organization and processes and procedures implemented to support the user base.
- 2. The Contractor shall provide service to customers in accordance with the Customer Service Plan.
- 3. The Contractor shall provide a central help desk, accessible by the users via a local phone call, toll-free number and Extranet. The Contractor shall accept issues from system users to the Contractor issue-tracking tool from the users workstation. In addition, the Help Desk staff shall accept potential issues from users via phone, Email, fax, and the Extranet and enter the issue in the issue-tracking tool on behalf of the system user. The help desk is the primary point of contact with the user community and as such provides coordination of production application and procedural issues.
- 4. To provide effective user support, the help desk shall be staffed with people thoroughly trained in the application.
- 5. The help desk shall be staffed at all times when the system is scheduled to be available for online processing and requests shall be responded to in no more than 10 minutes. Outside of available hours inquiries shall be responded to in no more than two (2) hours.
- 6. The Contractor shall document, track and update each help desk inquiry from initiation through resolution as required in Paragraph 3.2.4, Issue Management using an automated system as described in Section 6, SyRS, Paragraph 7.1.6, Issue Tracking System.

# 4.4.10 System Administration Reporting and Metrics

- 1. The Contractor shall deliver a monthly Operations Management Report to the State Project Manager which includes but is not limited to:
  - a. Summary of operational issues arising in the current timeframe and status of any unresolved issues from prior timeframes
  - b. Status of any planned infrastructure, hardware, and/or software changes
  - c. Monthly system performance metrics and compliance to include:
    - i) System Availability
    - ii) Scheduled Downtime with explanation
    - iii) Unscheduled Downtime with explanation and resolution

- iv) Average system response times both over the period and specifically for the one (1) hour that system response was slowest. This information shall be available at the individual task level
- v) System resource utilization through the month including but not limited to CPU, Network, Memory and Disk
- vi) Batch processing performance during the month including job runtimes
- d. Explanation of any performance anomalies during the reporting period and activities to resolve and prevent further occurrences
- e. Explanation of any failures and activities to resolve any potential for future occurrences
- f. All planned operations and maintenance activities scheduled for the next month
- g. Summary of operations and maintenance activities.
- 2. The Contractor shall submit to the State Project Manager a Daily Production Status Report including, but not limited to:
  - a. Summary of all problems by category
  - b. Description of all critical or serious problems
  - c. Summary of all failures to achieve service level objectives with explanations.
- 3. As part of the Monthly Project Status Report, the Contractor shall report Help Desk metrics, by category and priority, to include inquiry volume including, but not limited to, calls, emails, faxes, and extranet entries.

## 4.5 Statewide Implementation

The purpose of the system implementation is to plan and execute the activities necessary to transition from operations with the existing system to an operation with the new or updated system without disrupting service to the customers. System Implementation involves analysis, planning, scheduling, staffing, and activities for:

- Business Change Management
- System deployment preparation
- Data Initialization
- Training
- Release Installation
- Pilot Operation
- County, CDSS, and external partner deployment
- Business Services Migration
- Help Desk
- Post Site Implementation Review
- Implementation Reporting and Metrics.

# 4.5.1 Implementation Roles and Responsibilities

The implementation of CMIPS II is a coordinated effort among the Contractor, HHSDC, Project Office, Sponsor, Incumbent Contractor, and users. The same coordinated effort, excluding the Incumbent Contractor, will be needed for CMIPS II modifications after DDI.

### 4.5.2 Statewide Implementation Planning

- 1. The Contractor shall develop, deliver, maintain and execute a Statewide Implementation Plan that identifies key milestones, methods, equipment requirements, schedules, high-level activities, staffing, deliverables, and success criteria that will be necessary to successfully implement CMIPS II statewide.
- 2. The Contractor shall develop, deliver, maintain and execute an Statewide Implementation WPU to supplement the Master Work Plan as described in Paragraph 3.1.2, Master Work Plan, to show all the major activities of implementation including, business change management, data cleanup, data conversion, training, site preparation, and system deployment. More detailed work plans for each major area of implementation will also be prepared as time get closer to the activity and more detail is known to include:
  - (a) Business Change Management Plan (to meet the requirements of Paragraph 4.5.3.1, Business Change Management)
  - (b) Data Cleanup WPU (to meet the requirements of Paragraph 4.5.4.1, Data Cleanup)
  - (c) Data Conversion WPU (to meet the requirements of Paragraph 4.5.4.2, Data Conversion)
  - (d) Statewide Site Preparation WPU (to meet the requirements of Paragraph 4.5.4.3.1, Site Preparation)
  - (e) Training WPU (to meet the requirements of Paragraph 4.5.4.4.1, Training Planning)
  - (f) County Deployment WPU (to meet the requirements of Paragraph 4.5.7, County Deployment)
  - (g) Business Services Migration WPU (to meet the requirements of Paragraph 4.5.9, Business Services Migration)
- 3. The Statewide Implementation Plan and Statewide Implementation WPU shall include tasks to be performed by State, county, external partner, and Incumbent Contractor resources.
- 4. The Statewide Implementation Plan and Statewide Implementation WPU will coordinate key tasks and activities with the Project Master Plan (Paragraph 3.1.1) and Master Work Plan (Paragraph 3.1.2).
- 5. The Statewide Implementation Plan and Statewide Implementation WPU will be developed and delivered incrementally. During the initial system development the Contractor shall deliver at least four (4) versions of the Statewide Implementation Plan and WPU; one (1) for each milestone of the System Requirements Validation Review, Detailed Design Review, Coding and Documentation Review, and Release Readiness Review. The Contractor shall update the Statewide Implementation Plan and WPU as needed until after the Post Statewide Implementation Review. Each version shall build on the previous version with an increased level of detail that is equal to the level of detail available about the system and implementation activities.
- 6. For statewide implementation planning, the Contractor shall take into consideration the size, technical readiness, number of sites located within the county, staff to be trained, and

complexity of data cleanup and data conversion. (Statistical references are located in the Bidder's Library, Artifact 1 – Metrics and Artifact 8 – Infrastructure Surveys.)

- 7. The Contractor shall support implementation planning and execution by district or groups of sites as requested by counties to make the implementation more manageable. Los Angeles County constitutes about forty-two (42) percent of the Recipients for the CMIPS II system, and close to one-third (1/3) of the IHSS/CMIPS employees that will need to be trained. Los Angeles County IHSS/PCSP records are found in eleven (11) distinct districts located in twelve (12) locations, and administered from one administrative office. The State Project Manager recommends that Los Angeles County be implemented in a parallel implementation effort with the other fifty-seven (57) counties. It is further recommended that implementation in one (1) district office within LA County be successfully completed prior to proceeding with county-wide implementation.
- 8. It is possible that some counties may encounter delays in obtaining system resources, delays in site preparation, or other scheduling delays. The Statewide Implementation Plan shall be modularized so that if any one county has to delay its implementation it will not jeopardize the scheduled implementation of the remaining counties or sites.
- 9. The Contractor shall coordinate and confirm all schedules with affected stakeholders for the statewide implementation. The Contractor shall have timely, two-way communication to keep all stakeholders informed of any changes or delays in the implementation work plans, in accordance with the Project Communication Plan.
- 10. The Contractor shall issue the minimum system requirements for county infrastructure to support the counties in procurement and installation of the equipment and site preparedness. The system requirements shall be issued not less than two (2) years prior to installation being required in the county.

# 4.5.3 Business Change Management

The purpose of the Business Change Management process is to assist the users in planning and smoothly implementing changes to their business processes and organization.

# 4.5.3.1 County Business Change Management

- 1. The IHSS/PCSP business processes in the counties will be significantly impacted with the implementation of CMIPS II. The Contractor shall prepare and deliver a statewide, county-by-county Business Process Gap Analysis detailing the differences between each county's current business processes and business processes necessary to successfully implement CMIPS II. The Contractor shall work with each county's identified Business Change Management Contact to obtain county information necessary to complete the analysis. The Contractor may be required to travel to counties to assist county staff in gathering data to complete the analysis.
- 2. Based on the cumulative results of the Statewide Business Process Gap Analysis, the Contractor shall prepare, develop, deliver, maintain and execute a Business Change Management Plan to facilitate the successful transition to the new system.

- 3. This plan shall include templates for use by the counties to develop individual county Business Change Management Plans. Development of the plan shall include a Focus Group Review Session with change management contact representatives of all levels of county readiness identified in the gap analysis, to a maximum of thirty (30) participants. The counties will then be able to customize the templates to meet their individual needs.
- 4. The Statewide Business Change Management Plan shall include, but not be limited to, the following items:
  - a. Templates for documents to assist managers in organizational change management
  - b. Templates for documents to assist managers in business process change management
  - c. Guides for Tools and Techniques for internal county Business Change Management communications.
- 5. The Contractor shall facilitate one (1) change management session per region (Northern, Central, Valley Mountain, and Southern) per year, with up to two (2) participants per county within the region to help them review the year's activities against the plan, record lessons learned, and update the Business Change Management Plan for the next year. The Contractor shall create and distribute the agenda and minutes from these meetings. The counties will maintain and execute their county Business Change Management Plans.
- 6. The Contractor shall report business change management status as part of the Monthly Project Status Report and weekly project status meetings.

## 4.5.3.2 State Business Change Management

- 1. Implementation of the CMIPS II system will have significant impact on CDSS, Adult Programs Branch (APB) business process. The Contractor shall develop and deliver an APB Business Process Gap Analysis identifying changes needed in the APB business processes in order to support the use of CMIPS II.
- 2. Based on the APB Business Process Gap Analysis, the Contractor shall develop, deliver, maintain and execute an APB Business Change Management Plan. The APB Business Change Management Plan shall include, but not be limited to, the following items:
  - a. Industry accepted Best Practices Guidelines for Business Process and Organizational Change Management
  - b. Templates for documents to assist Managers in organizational change management
  - c. Templates for documents to assist Managers in business process change management
  - d. Guides for Tools and Techniques for internal Change Management communications.
- 3. The Contractor shall conduct a Review Session with change management representatives of APB identified in the gap analysis. The Contractor shall facilitate one (1) change management session per bureau per year to help them review the year's activities against the plan, record lessons learned, and update the APB Business Change Management Plan for the next year. The Contractor shall create and distribute the agenda and minutes from these meetings.

- 4. The Contractor shall develop and deliver a Statewide Policy Impact Plan identifying impacts to current and planned IHSS/PCSP policies. The Contractor shall work with APB Policy Bureau staff to identify and recommend solutions for changes needed to existing policy and potential areas requiring new policy.
- 5. The Contractor shall report business change management status as part of the Monthly Project Status Report and weekly project status meetings.

## 4.5.4 System Deployment Preparation

The Contractor is responsible for activities to help prepare the State, counties, and external partners for the system deployment to include:

- Data cleanup
- Data conversion
- Site preparation
- Training

#### 4.5.4.1 Data Cleanup

- 1. The Contractor is responsible for the data cleanup to ensure there are no data errors or inconsistencies prior to data conversion. Along with the Statewide Implementation Plan the Contractor shall develop, deliver, maintain and execute Data Cleanup Plan to ensure all legacy data will be accepted by CMIPS II. The Data Cleanup Plan shall include but is not limited to:
  - a. Explanation of the strategy and methods for data cleanup
  - b. Description of data cleanup activities
  - c. Description of tools and procedures used to identify and report potential data issues
  - d. Description of automated tools and procedures to automatically manipulate data
  - e. Estimates of Contractor, State, and county resources required to support the cleanup effort
  - f. Data cleanup schedule.
- 2. As part of data cleanup, the Contractor shall:
  - a. Manage and coordinate the data cleanup effort
  - b. Identify and report data errors and inconsistencies that would prevent the legacy data from loading and passing validations, rules, or would cause reporting errors in CMIPS II
  - c. Ensure no data is lost
  - d. Provide training required to enable the State and county personnel to interpret the reports and use any automated tools to correct data
  - e. Oversee and coordinate county and State manual data cleanup effort
  - f. Prepare and distribute data cleanup assessments to the designated county and State personnel
  - g. Prepare and distribute status reporting of progress and planned effort on a monthly basis both to individual counties and the State

- h. Design, develop, and deliver automated cleanup tools
- i. Provide support for the operation of automated data cleanup tools
- j. The data cleanup process and tools shall adhere to the Configuration Management Plan as defined in Paragraph 3.2.6, Configuration Management, to include data control and recovery.
- 3. The Contractor shall develop, deliver, maintain and execute a detailed Data Cleanup WPU defining how the above tasks will be completed.
- 4. The Contractor, with State and county assistance, shall complete data cleanup activities according to plans prior to data conversion in each county. The Contractor shall support the State's Data Cleanup Review for each county to ensure all data cleanup activities were successfully complete and the resulting data is accurate and complete.
- 5. Once initial county data cleanup is completed prior to conversion, the Contractor shall continue to run sweeps of the legacy data up to the time the county is converted to ensure that data issues are not introduced after the initial data cleanup. All software developed to support the Data Cleanup Plan shall be developed in accordance with the System Development Plan defined in Paragraph 4.1.1, System Development Planning.
- 6. The Contractor shall report the status of data cleanup in the Monthly Project Status Report and weekly project status meetings. The report shall include metrics to assess the size and percent complete for data cleanup per county.

#### 4.5.4.2 Data Conversion

The Contractor is responsible for converting the existing data in the legacy database for use with the new system. See Artifact 2 – Current System Dictionary, located in the Bidder's Library for a description of the current database LDD.

- 1. The Contractor shall extract, convert, and load all data to support the business processes with CMIPS II. The conversion effort shall minimize disruption to county and State operation.
- 2. The Contractor shall develop, deliver, maintain and execute a Data Conversion Plan that addresses data conversion, to include:
  - a. Conversion Method An automated method of conversion that requires minimal intervention from State and county staff
  - b. Conversion Control A means to control the conversion of selected counties
  - c. Conversion Reporting A mechanism for identifying and reporting conversion errors
  - d. Conversion Reconciliation A method to reconcile converted data and differentiate between converted data versus new system data
  - e. Conversion Preparation:
    - i) File and/or database names and descriptions
    - ii) File structures
    - iii) Conversion rules
    - iv) Dependencies

- v) Conversion acceptance criteria
- f. Conversion Procedures:
  - i) Automated procedures, e.g., conversion programs
  - ii) Manual procedures (data entry procedures) and resource requirements
  - iii) Conversion verification procedures
- g. Activities required to perform file balancing and control
- h. Special conversion training, such as conversion data entry, file balancing and control
- i. The number and type of support staff and required time frames
- i. Data verification and validation
- k. Conversion Timeline The schedule of activities, to complete conversion at implementation.
- 3. The Contractor shall develop, deliver, maintain and execute a detailed Data Conversion WPU defining how the above tasks will be completed.
- 4. The Contractor shall support the State's Data Conversion Reviews to ensure all data conversion activities were successfully completed and the resulting data is accurate and complete.
- 5. All software developed to support the Data Conversion Plan shall be developed in accordance with the System Development Plan defined in Paragraph 4.1.1, System Development Planning.
- 6. For data not in the Legacy CMIPS System, the Contractor shall support migration from other sources to include, but not limited to, databases, spreadsheets, and documents in both hardcopy and electronic format.
- 7. Where possible the Contractor shall implement automated techniques to migrate data to reduce the burden of any data entry by the county.
- 8. The Contractor shall report the status of data conversion in the Monthly Project Status Report and weekly project status meetings.
- 9. After conversion, and prior to production, the Contractor shall verify that the data has been accurately converted to the new system and that no data was inadvertently lost.

# 4.5.4.3 Site Preparation

There are five (5) types of production sites to be prepared for implementation of the system:

- The HHSDC will host the production application, support tools, and test equipment
- The HHSDC site will host the WAN
- The CDSS site hosts its office equipment including workstations, printers, and the CDSS LAN
- The county and State sites that provide IHSS/PCSP services that require CMIPS II system access will be responsible for their desktop equipment and WAN/LAN. The

- counties may also be the site for the forms architecture which is under the Contractor's responsibility to install and maintain.
- The Contractor will be responsible for hosting the central timesheet processing equipment

The number of county sites and the number of State sites with supporting infrastructure details can be found in the Bidder's Library, Artifact 8 – Infrastructure Surveys.

- 1. The Contractor has overall responsibility for coordination of statewide site preparation and shall monitor other organizations to ensure all the sites are prepared in accordance with specifications and the statewide implementation schedule.
- 2. The Contractor shall develop, deliver, and maintain a Data Center Site Specification, CDSS Site Specification, and County Site Specification that:
  - a. Provide a detailed list of minimum hardware and software requirements
  - b. Include software requirements with product names, version numbers, number of licenses needed for full implementation, function, and operating system requirements
  - c. Include installation and configuration guidelines for the counties to use in configuration of all hardware and software
  - d. Include network capacity specifications for the counties, external partners and HHSDC to use in capacity planning.
- 3. The Contractor shall update and deliver the Statewide Implementation Plan to include a detailed Statewide Site Preparation WPU that shall address:
  - a. Identification of high-level tasks for the evaluation of system requirements, installation, testing, verification, and certification of State and county infrastructures
  - b. Identification of network, workstation, printer, software, and any other data processing equipment, products, or services necessary for the operation of CMIPS II at sites
  - c. Identification of roles, responsibilities, and activities for the county, State, interface agency, and any other related users to complete site preparations to implement CMIPS II.
- 4. The Contractor shall monitor the other organizations' preparation activities according to approved plans. The Contractor shall report site preparation status as part of the Monthly Project Status Report. The monthly report shall include, but is not limited to, statewide metrics for:
  - a. Percent complete for each site preparation
  - b. Actual progress versus scheduled progress for each site
  - c. Any issues identified including those for tasks that are not the responsibility of the contractor.
- 5. The Contractor shall conduct a Production System Readiness Review, with participation from CDSS, HHSDC and the Project Office, at least three (3) calendar months prior to the first county or State Deployment to ensure implementation preparation activities and deliverables are successfully completed. The Contractor shall document the results of the reviews in Production System Readiness Reports.

### 4.5.4.4 Training

The Contractor will provide initial and ongoing training for entities that will require access to or operational knowledge of the CMIPS II system. The Contractor shall conduct student surveys to be used by the State in evaluating effectiveness of training and requiring improvements to the training. For training purposes, the Contractor shall categorize user roles as Program Oversight, Case Management Operations, Payroll Operations, Administrative Support, Public Authority Support and Technical Application Support:

- a. Program Oversight will include, but is not limited to, APB Staff roles and County Management roles
- b. Case Management Operations will include, but is not limited to, Social Worker Supervisors and Social Workers user roles
- c. Payroll Operations will include, but is not limited to, Payroll Supervisors and Payroll Clerks user roles
- d. Administrative Support will include, but is not limited to, clerical and data entry staff user roles
- e. Public Authority Support will include, but is not limited to, PA staff assigned to produce and use reports authorized for Public Authorities
- f. Technical Application Support will include, but is not limited to, State and county technical staff who assist in the support of the application.
- 1. The Contractor shall offer the State and counties multiple training options including:
  - Classroom training for users by role
  - Classroom training for staff who are first time trainers. This training will be referred to as "New Train-the-Trainer"
  - Classroom training for staff who have completed New Train-the-Trainer training and need instruction for training line staff on system change. This training will be referred to as "Ongoing Train-the-Trainer"
  - Self-paced, continuously available tutorials staff can use from county staff worksites
  - Fee-based CMIPS II classroom training for users by role. This training will be available to counties after implementation.
- 2. The content of the role-based o training shall include:
  - Explanation of CMIPS II functionality, navigation, and operation for the user's role
  - Hands-on demonstration and practice of CMIPS II functionality, navigation, and operation for the user's role
  - Explanation of user documentation
  - Hands-on demonstration and practice of on-line help tools
  - Explanation of self-paced tutorials

- Explanation of problem reporting and issue resolution process.
- 3. The content of the New Train-the-Trainer training shall include:
  - How to be a Trainer
  - Explanation of CMIPS II functionality by user role
  - Hands-on demonstration of CMIPS II functionality by user role
  - Explanation of user documentation
  - Hands-on demonstration of on-line help tools
  - Hands-on demonstration of Self-paced tutorials
  - Explanation of problem reporting and issue resolution process
  - Explanation of the impact to CMIPS II Business Process
  - Explanation of how to implement Organizational Change Management.
- 4. The content of the Ongoing Train-the-Trainer training shall include:
  - Explanation of CMIPS II changes by user role
  - Hands-on demonstration of CMIPS II change by user role
  - Review of changes to user documentation
  - Hands-on demonstration of on-line help tools
  - Hands-on demonstration of Self-paced tutorials
  - Explanation of the impact to CMIPS II Business Process
- 5. Training shall be conducted at State or county provided sites in Northern and Southern California.

### 4.5.4.4.1 Training Planning

- 1. The Contractor shall develop, deliver, maintain and execute a Training Plan to include descriptions of course objectives, course curriculum, Training Materials, training methods, staffing, equipment, and schedules for all training.
- 2. The Contractor shall develop, deliver, maintain and execute a detailed Training WPU to supplement the Master Work Plan (Paragraph 5.1.4 Implementation, Master Work Plan). The Contractor shall update the Training Plan and Training WPU semi-annually to reflect initial training, ongoing training, and additional training required for updated CMIPS II releases.
  - a. For initial training, the Contractor shall coordinate the Training Plan and Training WPU with each county-prepared County Deployment Work Plan (Paragraph 5.1.4 Implementation, County Deployment Planning) and the Statewide Implementation Plan to assure that training is completed prior to system deployment in that county.
  - b. For ongoing training, Contractor shall coordinate with the counties and CDSS APB staff to identify training needs and schedule training for each calendar year subject to the State Project Manager approval.
  - c. The training schedule shall show training projections for at least the next year.

- 3. The Contractor shall develop, deliver and distribute an Annual Training Calendar for all CMIPS II users by December 31 of the preceding year subject to the State Project Manager approval. The Contractor shall publish the Annual Training Calendar on the CMIPS II website. The Contractor shall notify users of any changes to the Annual Training Calendar via the CMIPS II website throughout the year.
- 4. The Contractor shall coordinate the Training Plan with the State and county budget processes to ensure adequate resources are available.

### **4.5.4.4.2** Implementation Training

During the DDI phase, the Contractor shall provide classroom training for each CMIPS II user role and for Train-the-Trainer for all entities that will require access to or operational knowledge of the CMIPS II system. User Roles are identified in Artifact 4 - User Roles, located in the Bidder's Library.

- 1. The Contractor shall complete classroom training for each user prior to the CMIPS II deployment to the user's site but no earlier than two (2) months prior to the deployment, or as approved by the State Project Manager.
- 2. The Contractor shall limit classroom training to no more than twenty (20) students per class unless otherwise approved by the State Project Manager.
- 3. The Contractor shall provide one (1) set of Training Materials per student per class unless otherwise approved by the State Project Manager.
- 4. For each classroom training session the Contractor shall administer a Student Survey, developed by the State to rate the instructor, instruction content, presentation, facility, and training materials, and to provide suggestions for improvement. The Contractor shall summarize the results in the Monthly Survey Metrics and provide a copy of the actual completed Student Surveys, upon request, to the CMIPS Project Office. The Contractor shall correct deficiencies or improve training as identified in the surveys as required or approved by the State Project Manager.

#### 4.5.4.4.3 Ongoing Training

During the M&O phase the Contractor shall provide classroom training for State and county staff.

- 1. The Contractor shall provide two (2) New Train-the-Trainer classes per year. One class will be held in a State or county facility in Northern California and one class will be held in a State or county facility in Southern California.
- 2. The Contractor shall provide six (6) additional training classes per year. The content of each class will be Train-the-Trainer or a class based on user role as specified by the State Project Manager. Classes will be held in a State or county facility in Northern California or Southern California.

- 3. The Contractor shall require a minimum of five (5) participants and a maximum of 20 participants per classroom training session unless otherwise approved by the State Project Manager.
- 4. If less than five (5) participants enroll in a class, the Contractor may cancel the session and notify participants no later than one week prior to training session date.
- 5. The Contractor shall provide training on the current application version in production or, if directed by the State project Manager, on an upcoming release.
- 5. For each classroom training session the Contractor shall administer a Student Survey, developed by the State to rate the instructor, instruction content, presentation, facility, and training materials, and to provide suggestions for improvement. The Contractor shall summarize the results in the Monthly Survey Metrics and provide a copy of the actual completed Student Surveys, upon request, to the CMIPS Project Office. The Contractor shall correct deficiencies or improve training as identified in the surveys as required or approved by the State Project Manager.

#### 4.5.4.4.4 Self-Paced Training

- 1. The Contractor shall develop, maintain, and deliver a self-paced User Training Solution that can be accessed from every site implementing CMIPS II.
- 2. Self-paced training shall allow the users, using the infrastructure prepared for implementation, to train and or practice on the user-role based functionality, navigation, and operational processes of the CMIPS II system.
- 3. The self-paced training shall be, at a minimum, available in at least one of the following formats: PC-Based, Web-based, or interactive CD. This training shall be designed for users new to the system and for minor system changes.
- 4. For initial training during the DDI phase, the Contractor shall make self-paced Training Materials available to CMIPS II users no later than four (4) weeks prior to implementation at the user's site.
- 5. For ongoing training purposes during the M&O phase, the Contractor shall update and distribute Self-Paced Training Materials for functionality changed by a Maintenance Release at least three (3) business days prior to the Maintenance release implementation at the user's site as approved in a Release Management Plan and Release Management WPU defined in Paragraph 4.3.5.1, Release Management Planning.

#### 4.5.4.4.5 Fee-Based New CMIPS II User Training

During M&O, upon written approval of the State Project Manager, the Contractor shall make additional classroom training available at the cost per session per student as set forth in Section 8 - Cost Instructions, Exhibit 12 - M&O Phase - Contractor Services - Operations - Training. Training will be for Newcomer Train the Trainer, Ongoing Train the Trainer, and Role Based Training and will be available to authorized entities that:

1. Provide the training facility and desktop equipment.

2. Guarantee a minimum of five (5) participants per classroom training.

### 4.5.4.4.6 Project Support Training

- 1. The Contractor shall provide classroom training to the Project and State staff on Contractor Materials used in support of the Project. Contractor Materials may include tools such as project management, issue tracking, help desk, requirements management, system testing, and system development, as applicable.
- 2. Starting the month following contract award, the Contractor shall provide a minimum of one (1) classroom training session for each tool with a minimum of twenty (20) participants, or as otherwise approved by the State Project Manager.
- 3. The Project Support staff training for Contractor Materials shall include:
  - a. Explanation of functionality, navigation, and operation for the tool
  - b. Hands-on demonstration and practice of operation of the tool
  - c. Explanation of user documentation
  - d. Hands-on demonstration and practice of on-line help, if applicable
  - e. Explanation of Self-paced tutorials, if applicable
  - f. Explanation of problem reporting and issue resolution process.
- 4. For ongoing Project Support Staff training, the Contractor shall provide for additional, tool specific, sessions at the direction of the State Project Manager as Project staffing needs require with a maximum of one training session per year per tool.

#### 4.5.4.4.7 Training Materials

- 1. The Contractor shall develop or secure all Training Materials for the training defined in Paragraph 4.5.4.4, Training.
- 2. During initial System Development Phase, the Training Materials shall be delivered at least three times: once for the Detailed System Design Review, once for the Coding and Documentation Review, and once for the Release Readiness Review.
  - 1) The Detailed System Design Review version of the Training Materials shall include at least the class syllabuses and Training Materials outlines.
  - 2) The Coding and Documentation Review version shall be fully developed Training Materials.
  - 3) Following the Coding and Documentation Review, the Contractor shall update Training Materials to reflect the as-built system for the remainder of the Contract.
  - 4) The Contractor shall deliver updated Training Materials as part of the Functional Test Review for every application release except emergency releases.
- 3. The Contractor shall inform users and trainers of updates and modifications to all Training Materials and user manuals.

- 4. The Contractor shall provide trained users and train-the-trainer graduates on-line access to all current Training Materials including, but not limited to:
  - 1) Training guides and materials
  - 2) Workbooks
  - 3) Documentation of changes to Training Materials
  - 4) Updated procedures and functionality of CMIPS II
  - 5) Presentation materials
  - 6) Course curriculum
  - 7) Training resources
  - 8) User Manuals
  - 9) Technical Product Manuals

#### 4.5.4.4.8 Public Outreach

The implementation of CMIPS II will have a significant impact on both the IHSS/PCSP Recipients and Providers. Recipients and Providers will need support and training to transition from the Legacy CMIPS System to CMIPS II business practices.

- 1. The Contractor shall conduct, in coordination with the State and county, a public outreach program for those impacted by the CMIPS II system.
- The Contractor shall prepare and deliver a Public Outreach Plan with detailed activities and schedule for informing IHSS/PCSP Recipients and Providers business process changes for CMIPS II.
- 3. The Contractor shall identify information that will be provided to IHSS/PCSP Recipients and Providers, in relation to the implementation, operation, and maintenance of CMIPS II and ongoing IHSS/PCSP Program as approved by the State Project Manager.
- 4. The Contractor shall develop, deliver, and initially distribute Public Outreach Materials on the business process changes associated with the CMIPS II implementation to the identified IHSS/PCSP Recipients and Providers.
- 5. The Contractor shall, in coordination with the counties and State, develop and maintain a statewide list of contacts that will be used for the ongoing distribution of the Public Outreach Materials.
- 6. The Contractor shall update and deliver and distribute to the identified contacts, Public Outreach Materials when System Releases require updating of the materials.
- 7. During the DDI phase, the Contractor shall provide one (1) one-day session describing the intent, use, and content of the public outreach materials in each of the four (4) CWDA Regions for a total of four (4) sessions statewide. These sessions shall be centrally located to accommodate travel for those counties attending the combined sessions. The Contractor shall allow up to three (3) participants per county.
- 8. For the life of the contract, the Contractor shall have two informational mailings per year to the recipients and/or providers containing material specified by the Adult Programs Branch Page 6-97

of CDSS. The Contractor shall prepare, print, and mail the material as approved by the State Project Manager. The material will not be more than can be printed on two sides of one piece of letter sized paper.

9. The Contractor shall report Public Outreach activities and results as part of the Monthly Project Status Report and weekly project status meetings.

### 4.5.4.5 Initial Database Population

The Contactor shall populate CMIPS II data fields according to the Statewide Implementation Plan. The Contractor shall coordinate with interface entities and external partners to ensure all data is available to meet the schedule defined in the Statewide Implementation WPU. The Contractor shall validate the completeness and accuracy of initial data and deliver a Database Readiness Assessment Report for each Site Readiness Certification.

#### 4.5.5 Release Installation

- 1. The Contractor shall, with approval from the State of the Release Readiness Review, install the approved application release in accordance with the Contractor's Release Installation Procedures.
- 2. After release installation the Contractor shall execute the Post Installation Verification Test to ensure that the installed components met the requirements. During the M&O phase, the Post Installation Verification Test for each Maintenance Release shall be prior to the next scheduled production available time. If the test fails, the Contractor shall immediately, and prior to the next production availability time, notify the State Project Manager or his/her designee.
- 3. No later than two (2) business days after any release the Contractor shall participate in a Post Installation Review with the State to identify any issues arising from the release, lessons learned from the process, and suggestion of process improvements.
- 4. If the test fails and subject to the approval of the State Project Manager the Contractor shall execute the Release Back-Out Plan prior to the next production availability.
- 5. If required by the architecture design and Release Management Plan, the Contractor shall release the Client application into the production environment.

# 4.5.6 Pilot Operation

Pilot Operation with selected counties is required prior to the State's acceptance of the system. Pilot Operation during DDI will be conducted in parallel with the daily production operations of the Legacy CMIPS System. All CMIPS II operations will be validated against the Legacy CMIPS System. Pilot Operations is not intended to process 100 percent of all system transactions, but rather process a representative sampling of transactions from all business processes.

1. The Contractor shall develop, deliver, maintain and execute a Pilot Operation Plan. The Pilot Operation Plan shall provide a detailed description of all operations required to ensure that all

of the system, interfaces, and components comply with the requirements and specifications. The Pilot Operation Plan shall:

- a. Define the Pilot Operation philosophy (including objectives, required levels or types of testing, and basic strategy).
- b. Describe operations to include:
  - i) The expected schedule for formally exercising the entire system
  - ii) How each phase of the operation is determined to be complete and the formal reports/debriefings conducted for each phase of the testing
  - iii) The processes and procedures that will be used by the Contractor for releasing results, analysis, and review of results.
- c. Describe all levels of operation, to include:
  - i) Software
  - ii) Interfaces
  - iii) Network connectivity including WAN
  - iv) Operating system scripts
  - v) Distribution scripts
  - vi) Installation verification
  - vii) Enterprise management integration.
- d. Identify all planned levels of operations, to include:
  - i) Data conversion
  - ii) Facilities/tools to be used
  - iii) Staff/resources.
- 2. The Contractor shall conduct Pilot Operation in two (2) selected counties within a fifty (50) mile radius of the CMIPS Project Office, in accordance with IEEE 12207, Paragraph 5.3.13, Software Acceptance Support, and in accordance with the Pilot Operation Plan. The Pilot Operations shall continue for a minimum of one (1) calendar month, and shall include at least two (2) complete payroll periods and one (1) complete monthly reporting cycle.
- 3. The Contractor shall provide sufficient resources to perform county data entry tasks during Pilot Operation.
- 4. Prior to conducting Pilot Operation, the Contractor shall complete the following System Implementation activities for each test county:
  - a. Statewide Implementation Plan (Paragraph 4.5.2)
  - b. Project Communication Plan (Paragraph 5.1)
  - c. County Business Process and Organizational Change Management (Paragraph 4.5.3.1)
  - d. Training as described in Paragraph 4.5.4.4 and subparagraphs.
  - e. Site Preparation as described in Paragraph 4.5.4.3
  - f. Data Cleanup as described in Paragraph 4.5.4.1
  - g. Data Conversion as described in Paragraph 4.5.4.2.

- 5. Pilot Operation shall include all System Operations as defined in the Operations Plan as described in Paragraph 4.4.1, System Operation Planning.
- 6. Pilot Operation shall include all program support activities as defined in all subparagraphs of Paragraph 4.6, Program Support.
- 7. The Contractor shall coordinate activities with the Legacy System Contractor to validate results.
- 8. Upon completion of each Pilot Operation, the Contractor shall deliver an Operations Management Report as defined in Paragraph 4.4.10, System Administration Reporting and Metrics.
- 9. On completion of Pilot Operation the contractor develop and deliver a Pilot Operations Review Report detailing how Pilot Operations were performed against the plan, any Operation deficiencies, and issues resulting from Pilot Operation. The Contractor shall participate in a Pilot Operation Review, in accordance with Paragraph 5.3.4.3, Milestone Reviews, with the State to establish that the system is ready for implementation.

#### 4.5.7 County Deployment

The Contractor will be responsible for deploying the initial and maintenance releases of the CMIPS II application to all affected work sites in all fifty-eight (58) counties in California. Counties are independent and separate legal entities from the State. As such, any particular county's preparedness, cooperation, and success in becoming operational with the CMIPS II application as scheduled is beyond the control of Contractor or the State. The State shall not be liable to Contractor or in default under the Contract if a county is not prepared or is late in becoming operational with the CMIPS II system as scheduled.

# 4.5.7.1 County Deployment Planning

- 1. The Contractor shall ensure county management is informed of the activities contained in the Statewide Implementation Plan and Statewide Implementation WPU that are relevant to counties.
- 2. The Contractor shall prepare and deliver a County Deployment Briefing for key county managers at each county.
- 3. The Contractor shall support the county in customizing the County Deployment Plan Template, and County Deployment Work Plan Update Template including:
  - a. Evaluation of each sites' readiness to support CMIPS II
  - b. Suggested course of action for aligning the sites with CMIPS II requirements
  - c. Estimation of effort and skills required.
- 4. The Contractor shall deliver at least two (2) versions of the County Deployment Plan Template and County Deployment Work Plan Update Template: one for the General Design Review and one for the Coding and Documentation Review. The Contractor shall refine the templates between deliveries based on feedback from a county/State work group planned and

facilitated by the Contractor. Once the templates are complete, the Contractor shall distribute them to all the counties.

## 4.5.7.2 County Deployment Execution

- 1. One (1) week prior to implementation, the Contractor, with the State and the county, shall conduct a County Deployment Readiness Review to ensure the county is fully prepared.
- 2. The Contractor shall coordinate each County Deployment according to the implementation and deployment plans. The Contractor shall report county/site deployment status against the Statewide Implementation Plan in the Monthly Project Status Report and weekly project status meetings.

## 4.5.7.3 County Onsite Support

- 1. The Contractor shall provide personnel to support each county in its pre-implementation and post implementation efforts. The CMIPS Project Office will support the county and coordinate with the Contractor and State to ensure timely implementation and minimize any risk to initial operations. The onsite support team shall prepare and deliver a Site Readiness Report for each site, indicating that the county site is ready for deployment, two (2) weeks prior to implementation.
- 2. The tasks and activities to be performed by these personnel shall be included in the County Deployment Plan and County Deployment WPU.
- 3. The Contractor, county and State shall conduct a Site Readiness Report Review in accordance with Paragraph 5.3.4.3, Milestone Reviews.

# 4.5.8 CDSS Deployment

The Contractor will be responsible for deploying the initial and maintenance releases of the CMIPS II application to all affected work sites in CDSS.

# 4.5.8.1 CDSS Deployment Planning

- 1. The Contractor shall ensure that CDSS management is informed of the activities contained in the Statewide Implementation Plan and Statewide Implementation WPU that are relevant to CDSS.
- 2. The Contractor shall prepare and deliver a CDSS Deployment Briefing for key CDSS managers and support CDSS in finalizing a CDSS Deployment Plan.

# 4.5.8.2 CDSS Deployment Execution

- 1. Two (2) weeks prior to implementation the Contractor with the State shall conduct a CDSS Deployment Readiness Review to ensure CDSS is fully prepared.
- 2. The Contractor shall manage and coordinate the CDSS Deployment according to implementation and deployment plans. The Contractor shall report deployment status against

the Statewide Implementation Plan in the Monthly Project Status Report and weekly project status meetings.

### 4.5.8.3 CDSS Onsite Support

- 1. The Contractor shall provide personnel to support CDSS in its pre-implementation and post implementation efforts. The CMIPS Project Office will coordinate with the Contractor and State to ensure timely implementation and minimize any risk to initial operations. The onsite support team shall prepare and deliver a CDSS Site Readiness Report, indicating that CDSS is ready for deployment, two (2) weeks prior to implementation.
- 2. The tasks and activities to be performed by these personnel shall be included in the Statewide Deployment Plan and Statewide Deployment WPU.
- 3. The Contractor and State shall conduct a Site Readiness Report Review in accordance with Paragraph 5.3.4.3, Milestone Reviews.

### 4.5.9 Business Services Migration

- 1. The Contractor shall develop, deliver, maintain and execute a Business Services Migration Plan that will define how business processes and support services will be transferred from the Legacy CMIPS System and the Incumbent Contractor to the CMIPS II system and Contractor to ensure those processes or services are not interrupted or degraded.
- 2. The Business Services Migration Plan shall include Contractor business processes defined in the System Requirements Specification and the support services identified in this SOW. The Business Services Migration Plan will take into consideration that the implementation will be phased and all counties will not be on one system until the entire statewide implementation is complete. The Business Services Migration Plan shall include:
  - a. Identification of business processes and supporting services that will be converted or migrated to CMIPS II from the Legacy CMIPS System
  - b. List of all supporting products and processes that the Contractor will require for transition and ongoing support of the system
  - c. Support for any tasks/processes that will require an interface with the Legacy CMIPS System or any other agency to continue effective daily processing of all systems
  - d. Identification of ownership of each task/process
  - e. Roles and responsibilities for each task/process
  - f. Training of all staff on products and procedures
  - g. Migration timeline coordinating all tasks/processes to be migrated
  - h. Schedule for the conversion of software products and/or data
  - i. Verification of migration of tools and/or data
  - j. Planned strategy for the "ramp up" of staff and resources necessary for supporting implementation and transitional tasks and services
  - k. Estimated effort of implementation staff, time, and resources necessary for implementation tasks and resources

- 1. Maintenance of archived and decommissioned legacy data, database(s), and associated systems.
- 3. The Contractor shall deliver a detailed Business Services Migration WPU for approval. The Contractor shall transition business processes and support services according to plan. The Contractor shall report transition status as part of the Monthly Project Status Report.

### 4.5.10 Implementation Reviews

- 1. For each site deployment, State and county staff will conduct a Post Site Implementation Review to verify the successful completion of the deployment activities and determine if the site is fully operational. The Contractor shall support each Post Site Implementation Review.
- 2. One calendar month after completion of successful implementation of the system in CDSS and all fifty-eight (58) counties the Contractor shall participate in a Post Statewide Implementation Review according to Paragraph 5.3.4.3, Milestone Reviews. In addition, this review shall analyze:
  - a. Lessons learned through the design, development, and implementation (DDI) phase of the project
  - b. All outstanding project issues
  - c. All outstanding system defects
  - d. The readiness of the project to move into the Maintenance and Operations phase
  - e. Operations Management Plan review
- 3. The results of the analysis shall be delivered to the State in the Post Implementation Review Report.

# 4.5.11 Implementation Reporting and Metrics

- 1. The Contractor shall provide status reporting on implementation through the Monthly Project Status Report and weekly project status meetings to include:
  - a. Status of implementation plans and schedules
  - b. Report of problems and effects of problems on the Statewide Implementation Plan and Schedule
  - c. Resource scheduling of staff and system resources.
- 2. Monthly implementation reporting shall include the following metrics, at a minimum:
  - a. Business Change Management
    - i) Number of County Change Management Plans reviewed and approved for both initial plans and annual updates
  - b. Training
    - i) Number of staff trained by county and training categories as well as statewide totals vs. planned
    - ii) Training satisfaction survey results that rates instructor, instruction content, presentation, facility, and Training Materials

- c. Site preparation
  - i) Number of sites planned vs. sites prepared by milestone
  - ii) Number of required vs. ready equipment by type, county, and site
- d. County deployment
  - i) Number of deployment milestones planned vs. completed by site and county.

# 4.6 Program Support

The Contractor provides support services to CDSS, the CWDs, and authorized users as defined in the following paragraphs.

## 4.6.1 Program Support Planning

- 1. The Contractor shall develop, deliver, maintain and execute a Program Support Plan that identifies methods, schedules, high-level activities, staffing, deliverables, and success criteria for the services and deliverables identified in Paragraph 4.6, Program Support. The Program Support Plan will coordinate key tasks and activities with the Project Master Plan (Paragraph 3.1.1).
- 2. The Contractor shall execute Program Support activities in accordance with the Program Support Plan.

#### 4.6.2 Case Management Services

- 1. The Contractor shall assist users in resolving problems with data entry and correcting data.
- 2. The Contractor shall obtain and update the CMIPS II system with a United States Postal Service (USPS) certified address file monthly.
- 3. The Contractor shall maintain and update funding percentages as required by Federal, State, or county mandates.

# 4.6.3 Payroll Processing Services

- 1. All Payroll Services shall be 100 percent complete which means warrant requests are issued to SCO for each valid timesheet in the timeframes established by IHSS policy.
- 2. All Payroll Services shall be 100 percent accurate which means all automated data entry and system calculations are error free.
- 3. The Contractor shall mail all system produced timesheets as defined in Section 6, SyRS, Paragraph 12.1.1.1, Issue Timesheet.
- 4. The Contractor shall submit payment system documentation to the SCO's Division of Audits prior to implementation of the tape claim payments system, pursuant to the California State Controller's Office Division of Audits Electronic Tape Claim Submission Requirements Manual.

- 5. Documentation submitted to SCO shall include all items defined in the California State Controller's Office Division of Audits Electronic Tape Claim Submission Requirements Manual, Section B Systems Documentation.
- 6. The Contractor shall setup and maintain the accounts and accounting structures required to support payroll and deduction management.
- 7. The contractor shall ensure that all accounts reconcile.
- 8. The Contractor shall reconcile payments against deductions, monthly at a minimum, and shall report any out of balance accounts and how they were corrected in the Monthly Project Status Report.
- 9. The Contractor shall enter, update, and maintain address and account information for all entities for which deductions are taken.

## 4.6.3.1 Daily Processing

- 1. The Contractor shall provide all of the following services in support of the daily payroll process as defined in Section 6, SyRS, Paragraph 12.1.6.2, Warrant and Timesheet Tape.
  - a. The Contractor shall process payroll a minimum of once every business day.
  - b. The Contractor shall verify that warrant requests are correct and appropriate to release before submitting the claim file to SCO.
  - c. The Contractor shall submit the claims files to SCO as an electronic claim.
  - d. The Contractor shall comply with all requirements as defined by SCO in the California State Controller's Office Division of Audits Electronic Tape Claim Submission Requirements Manual.
  - e. The Contractor shall submit all systems documentation to SCO as defined in the California State Controller's Office Division of Audits Electronic Tape Claim Submission Requirements Manual.
  - f. The Contractor shall produce a SCO claims schedule for every claims file.
  - g. The Contractor shall arrange for CDSS signature on the claims schedule and delivery to SCO no later than 10:00 AM each business day.
  - h. The Contractor shall arrange for pick-up of the data exchanges files from both SCO and State Treasurer's Office (STO) each business day.
  - i. Daily, the Contractor will receive a file containing warrant numbers, date issued, and net dollar amounts from SCO and shall update the system with the received information.
  - j. Daily, the Contractor will receive a file containing cleared and redeposited warrant information from STO and shall update the system with the received information.
  - k. The Contractor shall ensure that the time from receipt of a timesheet to transmittal of the warrant request to SCO is not more than five (5) days.
- 2. The Contractor shall provide all of the following services in support of the advance pay, WPCS pay, restaurant meals allowance, adjustment payments, and emergency/supplemental pay as defined in Section 6, SyRS, Paragraph 12, Payroll Requirements, and subsections.

- a. The Contractor shall verify that payroll is correct and appropriate to release before submitting the claim file to SCO.
- b. The Contractor shall submit the claims files to SCO as an electronic claim.
- c. The Contractor shall comply with all requirements as defined by SCO in the California State Controller's Office Division of Audits Electronic Tape Claim Submission Requirements Manual.
- d. The Contractor shall submit all systems documentation to SCO as defined in the California State Controller's Office Division of Audits Electronic Tape Claim Submission Requirements Manual.
- e. The Contractor shall produce a SCO claims schedule for every claims file.
- f. The Contractor shall arrange for CDSS signature on the claims schedule and delivery to SCO no later than 10:00 AM daily.
- g. The Contractor shall arrange for pick-up of the data exchanges files from both SCO and STO.
- h. The Contractor shall receive a file containing warrant numbers, date issued, and net dollar amounts from SCO and update the system with the received information.
- i. The Contractor shall receive a file containing cleared and redeposited warrant information from STO and update the system with the received information.
- 3. Upon receipt of undeliverable warrants from SCO, the Contractor shall update the system to indicate that warrants were returned to SCO because they were undeliverable and mail the timesheet and statement of earnings to the appropriate county/district office.
- 4. The Contractor shall provide all of the following services in support of the electronic fund transfer process as defined in Section 6, SyRS, Paragraph 12.1.6.2.2, Electronic Funds Transfer
  - a. Daily, the Contractor shall process a tape of all pre-note cases.
  - b. The Contractor shall provide the EFT pre-note tape, transmittal sheet and tape information to CDSS.
  - c. The Contractor shall process payroll and produce EFT claims files for SCO.
  - d. The Contractor shall provide an EFT Claim Schedule and the EFT file to CDSS.
  - e. The Contractor shall arrange for CDSS signature on the claims schedule and delivery to SCO no later than 10:00 AM daily.
  - f. The Contractor shall arrange for pick-up and delivery of the data exchanges files from both SCO and STO.

#### 4.6.3.2 Taxes

- 1. The Contractor will provide all of the following services in support of all tax reporting processes as defined in Section 6, SyRS, Paragraph 12.1.7, Tax and Contribution Management.
- 2. The Contractor, upon CDSS Project Manager approval, shall process required Federal tax forms for all Individual Providers and Recipients.

- 3. The Contractor, upon CDSS Project Manager approval, shall process required State tax forms for all Individual Providers and Recipients.
- 4. The Contractor shall notify CDSS of required tax payment amounts. CDSS will notify the appropriate bank to transfer the required amount to a specified tax payment account that will be electronically transferred as payment by the IRS on a specified date.
- 5. The State has one Federal employer identification number that shall be used by the Contractor to report Social Security and Federal unemployment tax on behalf of all IHSS/PCSP Recipients qualifying as employers for such benefits.
- 6. The Contractor shall provide mandatory tax updates in compliance with all applicable tax laws.
- 7. The Contractor shall update the database with values and rates from each year according to Federal and State tax publications.
- 8. The Contractor shall coordinate all quarterly and annual tax deposits as defined in the Internal Revenue Service Circular E, Employer's Tax Guide (Publication 15), Internal Revenue Service Household Employer's Tax Guide (Publication 926) the Employment Development Department Household Employer's Guide (DE-8829) and the Employment Development Department Employer's Guide (DE-44) or their successor publications if these are discontinued.
- 9. The Contractor shall maintain all tax records, returns, schedules, and statements pursuant to 26 CFR §31.6001-1.
- 10. The Contractor shall process all Federal Insurance Contributions Act (FICA) refunds.
- 11. The Contractor shall submit the Report of New Employees (DE 34) as defined in Exhibit 6B-1, Interfaces, by the Employment Development Department.
- 12. The contractor shall submit an Income and Eligibility Verification System (IEVS) Wage Match file as defined in Exhibit 6B-1, Interfaces.
- 13. The Contractor shall at all times be knowledgeable and ensure that the System performs all transactions in conformity with all applicable federal, State, county and local laws, regulations, codes, standards, and ordinances related to taxation.

#### 4.6.3.3 W2

- 1. The Contractor shall provide all of the following services in support of W-2 reporting processes as defined in Section 6, SyRS, Paragraph 12.1.7.11, Wage and Tax Statement (W-2).
- 2. The Contractor shall send Copy A of Forms W-2 to the Social Security Administration (SSA) by the last day of March to report the wages and taxes for the previous calendar year along with a Form W-3 Summary Transmittal.

- a. The Contractor shall process correction forms W-2c and W-3c as defined by SSA Publication No. 31-031, Software Specifications and Edits for Correcting Annual Wage Reports to correct previously reported Social Security or Medicare wage data.
- b. The Contractor shall mail a W-2 to each Provider by January 30 of each year.

### 4.6.3.4 Withholding Management

- 1. The Contractor shall enter and maintain W-4 and DE-4 forms and records as defined in Section 6, SyRS, Paragraph 12.1.7.4, Employee's Withholding Allowance Certificate (W-4 and DE-4).
- 2. The Contractor shall update W-4 and DE-4 information in the system no later than twenty (20) business days from the date of receipt of the W-4 or DE-4 at the Contractor's site.
- 3. The Contractor shall return all incorrect or incomplete W-4 and DE-4 forms to the individual Provider, along with a letter stating the required remediation, no later than ten (10) business days from the date of receipt of the W-4 or DE-4 at the Contractor's site.
- 4. The Contractor shall send copies of Form W-4 to the IRS and Form DE-4 to EDD for Providers that claim more than the threshold withholding allowances or exemptions pursuant to EDD EMPLOYER'S OBLIGATIONS FOR FORM W-4 or DE 4 (DE 71), as defined in Section 6, SyRS, Paragraph 12.1.7.4, Employee's Withholding Allowance Certificate (W-4 and DE-4).
- 5. The Contractor shall enter and maintain Earned Income Credit (EIC) and W-5 forms and records as defined in Section 6, SyRS, Paragraph 12.1.7.5, Earned Income Credit (W-5).
- 6. The Contractor shall update the system with information received on Form W-5 no later than the end of the payroll period in which the Form W-5 is received at the Contractor's site.
- 7. The Contractor shall return all incorrect or incomplete W-5 forms to the Individual Provider, along with a letter stating the required remediation, no later than ten (10) business days from the date of receipt of the W-5 at the Contractor's site.
- 8. The Contractor shall accurately and timely submit all necessary Unemployment Insurance (UI), Employment Training Tax (ETT), Disability Insurance (DI), and Personal Income Tax (PIT) withheld, with a completed Payroll Tax Deposit (DE 88/DE 88ALL), on a quarterly basis pursuant to Employment Development Department in support of the tax processes as defined in Section 6, SyRS, Paragraph 12.1.7, Tax and Contribution Management.

#### 4.6.3.5 Liens

- 1. The Contractor shall enter and maintain lien records as defined in Section 6, SyRS, Paragraph 11.1.8.1, Lien Management.
- 2. The Contractor shall process lien information in the system as determined by the instructions of the lien or within fifteen (15) business days from the receipt of the lien at the Contractor's site, whichever is sooner.

3. The Contractor shall return all liens that cannot be applied to the lien requestor, along with a letter of explanation, within twenty (20) business days from the date of receipt of the lien request at the Contractor's site.

## 4.6.3.6 Warrant Problem Management

- 1. The Contractor shall request from SCO copies of cashed warrants within two (2) business days of receipt, in support of the Stolen Warrant process as defined in Section 6, SyRS, Paragraph 12.2.4, Replacement Warrants.
- 2. The Contractor shall validate the copies of cashed warrants and forward the copies to the applicable counties within five (5) business days of receipt.
- 3. When the warrant is not cashed by the payee and forgery documentation is received from a county, the Contractor shall complete a "Reissuance of Forged Warrant" form and send it with forgery documentation from the county to SCO within five (5) business days of receipt.
- 4. When invalid or incomplete forgery documentation is received from a county, the Contractor shall return it to the county along with a statement of the reason within five (5) business days.
- 5. The Contractor shall enter and maintain all forgery warrant information in the system.
- 6. The Contractor shall submit the STD-435, Request for Duplicate Controllers Warrant / Stop Payment, to SCO within two (2) business days of receipt, and enter and maintain warrant records in support of the Replacement Warrant process as defined in Section 6, SyRS, Paragraph 12.2.4, Replacement Warrants.
- 7. The Contractor shall enter and maintain warrant records within two (2) business days of receipt, in support of the Redeposit and Void Warrant process as defined in Section 6, SyRS, Paragraph 12.2.6, Redeposits.
- 8. The Contractor shall send all applicable documentation to SCO to request a Redeposit of an IHSS/PCSP Warrant and keep copies of redeposit documentation for records.
- 9. The Contractor shall track the redeposit status from SCO's Remittance Advice listing.
- 10. The Contractor shall update the system with the statement information received from SCO for warrants that are returned directly to SCO to be voided.

### 4.6.3.6.1 Lost, Never Received or Mutilated Warrants

In the event the warrant is lost, never received, or mutilated, the Payee completes a "Request for a Duplicate Controller's Warrant" form and sends it to the county. County staff process a Void transaction in the system, enter a replacement warrant request in the system, and send the Request for Duplicate Controller's Warrant form to the Contractor.

1. The Contractor shall forward the Request for a Duplicate Controller's Warrant form to the State Controller the same business day it is received.

2. The State Controller's Office voids the original warrant, issues a replacement warrant and mails the replacement to the payee. The turnaround at SCO is a minimum of ten (10) business days.

#### 4.6.3.6.2 Stale Dated Warrants

An IHSS/PCSP warrant becomes Stale Dated (void) if it remains un-cashed after one (1) year from the date of issue. CDSS then has two (2) additional years to replace the un-cashed warrant. Warrants between one (1) and three (3) years are replaced through the Replacement Warrant process. An un-cashed warrant that is older than three (3) years from date of issue must be submitted to the State Board of Control (BOC) for payment. The State Treasurer will not reimburse a bank that cashes these warrants and the payee must submit an "Equity Claim" to the California Victims Compensation and Government Claims Board at the State Board of Control. Equity claims are established under Government Code Section 905.2 where there is no legal obligation on the part of the State for claimed damages or no appropriation available for payment, but the claimant is requesting equitable relief from the State.

- 1. The Contractor shall validate the warrant claim schedule number on the Stale Date Warrant report from SCO for Stale Dated warrant requests received from the counties within five (5) business days of receipt.
- 2. The Contractor shall send the validated Stale Dated Warrant request to SCO and send a copy to CDSS within one (1) business day of validating the warrant claim schedule number.
- 3. The Contractor shall enter and maintain all stale dated replacement requests in the system.

## 4.6.3.7 Timesheet Processing

- 1. The Contractor shall process automated time entry for all complete and accurate timesheets received at the timesheet processing location within one (1) business day of receipt.
- 2. The Contractor shall date and time stamp each timesheet as received within two (2) hours of physical receipt at the processing location.
- 3. The Contractor shall have a process for timesheet exception handling.
  - a. The Contractor shall identify timesheet exceptions.
  - b. The Contractor shall remedy timesheet exceptions that do not require county intervention.
  - c. The Contractor shall provide the county offices with support and information for the exception resolution.
    - i) For timesheets that could be imaged, but require exception handling for errors or inconsistencies, the Contractor shall notify the applicable county of all timesheet errors and provide the image of the problem timesheet within four (4) hours of discovery.
    - ii) For hardcopy timesheets that could not be successfully imaged, e.g., due to mutilation, the Contractor shall notify the applicable county of the problem within four (4) hours of discovery and send it back to the county of origin within one (1) business day.

- d. The Contractor shall track exception timesheets from the time of receipt through final resolution for audit purposes and to be able to report the status to affected customers.
- 4. The Contractor shall manage all timesheet images and make them available to county offices within one (1) day of input.
- 5. The Contractor shall audit the processing of timesheets to ensure that no timesheets are missed.
- 6. The Contractor shall store timesheets for five and one-half (5.5) years.
  - a. Original timesheets less than eighteen months (18) old shall be retrieved by the Contractor and sent to the requestor within three (3) business days of request.
  - b. Original timesheets older than eighteen (18) months shall be retrieved by the Contractor and sent to the requestor within seven (7) business days of request.
- 7. The Contractor shall report as part of the Operations Management Report:
  - a. The success rate of the automated timesheet entry process.
  - b. The number of exception timesheets that had to be returned to each county.
  - c. On a monthly basis, the Contractor shall calculate the frequency distribution of the time to resolve exception timesheets.

## 4.6.4 Program Integrity Services

- 1. The State will secure the services of an independent vendor to perform an annual independent financial audit of the system. The audit will document any areas of the business process or application that are identified as introducing risk from an accounting perspective including a risk mitigation strategy for each. The Contractor shall make necessary resources and system access available for each audit.
- 2. The Contractor shall provide all reports, data, and documentation as requested by CDSS for audit purposes.

# 4.6.5 Funding Source Management

The contractor shall provide services and support to the CDSS APB Fiscal staff during implementation and maintenance of the funding source management solution to include the following areas: account setup, funding calculations formula setup, payment distribution setup, and data population.

# 4.6.6 Website Management

1. The Contractor shall establish and maintain an Internet website for communications with system users. At a minimum, this site will contain pertinent All County Information Notices (ACINs), All County Letters (ACLs), and communications currently available by electronic bulletin board (EBB). The site content shall be user friendly and shall be searchable by subject matter content and by communication's date of issue.

- 2. In addition to any other applicable State and Federal laws, the website shall comply with Section 508 of the Rehabilitation Act Amendments of 1998 for accessible web design and compatibility. The website shall adhere to W3C Web Content Accessibility Guidelines 1.0 Conformance Level A and Priority Level 2 checkpoints 10.2 and 12.4 selected by the State. The website shall adhere to technical standards for accessible Web design and compatibility, located in the Accessibility Guide and the Style Implementation Guidelines, pursuant to Executive Order D-17-00 issued on September 8, 2000.
- 3. The Contractor shall perform regular ongoing maintenance and monitoring of the IHSS/CMIPS II website.
- 4. The Contractor shall perform the day-to-day management, content management, user management, and content updates of the website. The Contractor shall obtain approve from the CDSS Project Manager for all content and submit content updates prior to publishing.
- 5. The content of the website shall include, at a minimum:
  - a. Business Bulletins
  - b. Contacts
    - i) County
    - ii) State
    - iii) Contractor
    - iv) Workgroups
  - c. System Issues
    - i) Submitted
    - ii) Status
    - iii) Release dates
  - d. Frequently Asked Questions
  - e. Change control items
    - i) Submit
    - ii) Status
    - iii) Release dates
  - f. User manual
    - i) As published
    - ii) Updates
  - g. Links
    - i) CDSS MPP
    - ii) ACIN
    - iii) ACL
    - iv) W & IC
    - v) CCR
    - vi) Program Policy Interpretation

- vii) CFR (Code of Federal Regulations)
- viii) Forms maintained by external agencies
- h. Report and file downloads
- i. Training Materials
  - i) Training guides and materials
  - ii) Workbooks
  - iii) Documentation of changes to Training Materials
  - iv) Updated procedures and functionality of CMIPS II
  - v) Presentation materials
  - vi) Course curriculum
  - vii) Technical user guides.

## 4.6.7 Forms Support

- 1. The Contractor shall design and develop the forms to be compatible with the forms architecture and supporting the forms solution. CDSS will be responsible for defining IHSS/PCSP form content and translating these forms into alternate languages.
- 2. The Contractor shall implement and support the forms architecture in the county sites.
- 3. The Contractor shall provide at the request of the State the downloadable fonts required to allow the counties to print forms in the support languages on county owned printers.
- 4. The Contractor shall at the request of the State configure and manage the application to allow users to print to county owned printers.

# 4.6.8 Reporting Support

- 1. The Contractor shall provide services in designing and developing new routine reports. CDSS will coordinate all system ad hoc reporting requests from counties and other outside entities in such a manner as to identify new routine reports needed and facilitate future requests for "like" reports.
- 2. The Contractor shall process system ad hoc reporting requests from counties and other outside entities upon CDSS approval.
- 3. The Contractor shall implement and support the printers defined in Section 6, SyRS, Paragraph 7.2.4 Printers

# 4.6.9 Project Service Requests

For services that are not explicitly defined in this Statement of Work, the State or Contractor may initiate a Project Service Request to request additional services or to refine existing services.

1. All project changes shall be initially identified through the Issue Management Process in Paragraph 3.2.4, Issue Management.

- 2. For project changes that have been initially approved by the PCMB as described in Paragraph 3.2.4, Issue Management, the Contractor shall create a Project Service Request to identify, classify, and assign an initial priority ranking in accordance with IEEE 1219, Paragraph 4.1, Problem/Modification Identification, Classification, and Prioritization.
  - a. The Project Service Request identification shall define the scope of the modification.
  - b. The Project Service Request shall include an impact analysis with an estimate for the number of hours and Contractor cost required to perform the service.
  - c. The Project Service Request shall include a work plan for the service.
- 3. The PCMB reviews all Project Service Requests for approval or denial.
  - a. The State issues a Work Authorization for approved services. See Section 11, MODEL CONTRACT, Section 4.4, Work Authorizations.
  - b. The Contractor shall close all Project Service Requests that are not approved through the Issue Management Process in Paragraph 3.2.4.
- 4. For Project Service Requests with a Work Authorization, the Contractor shall use the issue management process and Project Service Request to document the results for each service.
- 5. The Contractor shall monitor and track all Project Service Requests through completion.

## 4.6.10 CDSS APB Infrastructure Support

- 1. The Contractor shall provide IT support for the CDSS APB equipment identified in Paragraph 5.7.4, CDSS-APB Hardware and Software.
  - a. The contractor shall have a problem reporting process where the CDSS APB users can notify the Contractor of problems within ten (10) minutes during regular business hours. The Contractor shall provide onsite support at CDSS APB within one (1) hour of problem notification. On initial equipment setup, the contractor shall deliver a complete inventory of all personal computers and printers procured for CDSS APB.
  - b. Contractor shall repair defective equipment within twenty-four (24) hours of reported equipment trouble. Contractor shall provide replacement equipment for use by the State when Equipment is removed from a workstation site for repair.
- 2. The Contractor shall maintain the CDSS APB IT Inventory and shall deliver an updated inventory every six (6) months. The inventory shall include, but is not limited to the following: Brand Name, Model or Model Number, and serial number of all hardware components.

# 4.6.11 Legal Impact Analysis Services

The Contractor shall continuously during the term of the Contract have the ability to provide certified Legal Impact Analysis Reports on Federal and State laws. This service will be initiated by the State through the Project Service Request Process.

## 4.6.12 Program Support Reporting and Metrics

- 1. The Contractor shall summarize and report program support activities and metrics in the Monthly Project Status Report and weekly project status meeting. The Program Support metrics shall include:
  - a. Number of liens received, pending and processed, frequency chart of time to process liens
  - b. Number of W-4s and DE-4s received, pending and processed; frequency chart of time to process W-4s and DE-4s.
  - c. Number of W-5s received, pending and processed; frequency chart of time to process W-5s.
  - d. Number of Requests for Photocopies of cashed warrants received, pending and processed.
  - e. Number of FICA Refunds pending and processed; frequency chart of time to process FICA Refunds.
  - f. Number of Affidavit of Lost/Stolen Warrant Forms received, pending and processed; frequency chart of time to process Affidavit of Lost/Stolen Warrant Forms.
  - g. Number of Redeposits received, pending and processed; frequency chart of time to process Redeposits.
  - h. Number of Replacement Warrants received, pending and processed; frequency chart of time to process Replacement Warrants.
  - i. Number of Stale Dated Warrants received, pending and processed; frequency chart of time to process Stale Dated Warrants.

### 5 SUPPORTING PROCESSES

### 5.1 Communication

The goal of the communications activities is to ensure that the appropriate individuals at all levels of the organization are aware of and understand responsibilities, processes, issues, and organizational changes in the development, implementation, operation, and maintenance of CMIPS II. An effective Project Communication Plan will be developed, in accordance with PMBOK Chapter 10, Project Communications Management, to ensure that the communications are two-way. The focus of the Project Communication Plan activities with regard to the new application/processes and their changes will be to:

- Clarify expectations
- Build acceptance and commitment
- Obtain active, effective participation to ensure adequate input, feedback, and problem resolution
- 1. The Contractor shall develop, deliver, maintain and execute a Project Communication Plan that ensures comprehensive and timely communication between all CMIPS II stakeholders, users and interface partners. The Project Communication Plan shall provide a framework for Project information exchange both within and outside the Project and shall:

- a. Identify general communication roles and responsibilities for the Contractor and stakeholders
- b. Identify formal communication requirements to include type of communication, frequency, audience, content, and media. These include routine communications such as status reports or briefings
- c. Contain a process for the development and maintenance of Master Contact and Informational Database of all Project stakeholders and contacts. The Master Contact and Informational Database shall be available to the State at the CMIPS Project Office and CDSS Adult Program Branch. The master contact tool shall be able to generate mailing labels and Email groupings for mass distribution of Project information. The contacts shall be categorized to assist in groupings and contact identification.
- 2. The State has identified that effective communication with the Stakeholders, throughout the project but especially in the implementation phases, will be <u>critical</u> to its success. The Contractor shall detail how such communication will be achieved in the <u>Project Communication Plan</u>. As implementation activities progress the Contractor shall fully develop a detailed plan with mitigation strategies for any identified communications risks.
- 3. The Contractor shall conduct, at least quarterly, a "communications diagnostic" of the CMIPS II stakeholders to identify each group's expectations, opportunities, and concerns regarding the CMIPS Project and implementation. Updates to the Project Communication Plan shall include mitigation strategies for concerns raised.

## **5.2 Documentation Management**

1. The Contractor shall develop and implement a Document Process in accordance with IEEE 12207, Paragraph 6.1, Document Process. The Contractor shall identify the documents to be produced for this Contract. For each document, the Contractor shall identify and describe the name, purpose, and procedures for development, review, modification, approval, production, storage, distribution, and configuration management. The Contractor shall develop, deliver, maintain and execute a Document Management Plan.

# 5.3 Quality Management

- 1. Quality is the delivery of a work product or deliverable that satisfies the business and technical requirements and possesses no errors and defects. In order to minimize the risk of receiving work products or deliverables of poor quality, the Contractor will develop, implement, and maintain a Quality Management process throughout the duration of the Project.
- 2. The Contractor shall support the State's Quality Assurance, Independent Verification and Validation (IV&V), and Project Oversight activities required by the DOF Information Technology Project Oversight Framework.

#### 5.3.1 Product Assurance

- 1. The Contractor shall develop, deliver, maintain and execute a Quality Assurance (QA) Plan in accordance with IEEE 12207, Paragraph 6.3.1.3, Quality Assurance Process and IEEE 730-1998, Standard for Software Quality Assurance Plans. The Quality Assurance Plan shall:
  - a. Include all items defined in IEEE 730, Paragraph 4, Software Quality Assurance Plans
  - b. Describe in detail the Contractor's approach to quality assurance to include:
    - i) Approach for defining quality standards and measurements for work products and deliverables
    - ii) Approach for verifying and validating that the Project's work products and deliverables meet defined quality standards
    - iii) Method for resolving issues regarding work product and deliverable quality.
  - c. Describe materials and automated tools used to support the Quality Management process.
  - d. Include sample logs, forms, and reporting mechanisms that support the Quality Management process.
  - e. Address all performance measures necessary to monitor a project comparable in size and scope to the CMIPS Project.
  - f. Describe how the Contractor will work cooperatively with multiple agencies and project participants including State staff, county staff, Subcontractors, and others.
  - g. Describe the methods used to ensure that all work performed by the Contractor is monitored and measured against the technical requirements of the Contract on an ongoing basis.
- 2. The Contractor shall develop, deliver, and maintain a Quality Assurance WPU to supplement the Master Work Plan as described in Paragraph 3.1.2, Master Work Plan and supplement with:
  - a. Verification and Validation WPU
  - b. Process Assurance WPU
- 3. The Contractor shall conduct Quality Assurance activities in accordance with the Quality Assurance Plan and Quality Assurance WPU.

#### 5.3.2 Verification and Validation

- 1. To supplement the Quality Assurance Plan, the Contractor shall develop, deliver, maintain and execute a Verification and Validation Plan in accordance with IEEE 12207, Paragraph 6.4.1.5, Verification Process; IEEE 12207, Paragraph 6.3, Quality Assurance Process; IEEE 1028, Paragraph 6, Inspections and IEEE 1059-1993, Guide for Software Verification and Validation Plans. The Verification and Validation Plan shall include at least the following sections:
  - a. Contract verification
  - b. Requirements verification
  - c. Design verification
  - d. Code verification
  - e. Integration verification

- f. Documentation verification.
- 2. The Contractor shall conduct Verification and Validation activities in accordance with the Verification and Validation Plan and IEEE 12207, Paragraph 6.4.1.6, Process Implementation, and the Test and Evaluation Master Plan as defined in Paragraph 4.2.5.1, Functional Testing.
- 3. The Contractor shall develop, deliver, and maintain a Verification and Validation WPU to supplement the Quality Assurance WPU and Master Work Plan as described in Paragraph 3.1.2, Master Work Plan.
- 4. The Contractor shall use requirements management software and tracking of requirements traceability through all life-cycle phases in accordance with the DOF Information Technology Project Oversight Framework.

#### **5.3.3 Process Assurance**

- 1. To supplement the Quality Assurance Plan, the Contractor shall develop, deliver, maintain and execute a Process Assurance Plan that defines how the Contractor meets and maintains Level 2 Key Process Areas of the Software Engineering Institute Capability Maturity Model for Software, Version 1.1 (SW-CMM) (CMU/SEI-93-TR-245). The Process Assurance Plan shall:
  - a. Describe in detail the Contractor's approach to process assurance in the following areas, at a minimum:
    - i) Requirements Management
    - ii) Software Project Planning
    - iii) Software Project Tracking and Oversight
    - iv) Software Quality Assurance
    - v) Software Configuration Management.
  - b. Describe how the Contractor will meet and maintain the commitment, ability, activities, measurement and analysis, and verifications for each of the above process areas as defined in the Key Practices of the Capability Maturity Model SM, Version 1.1 (CMU/SEI-93-TR-025).
- 2. The Contractor shall conduct semi-annual audits of the System Security Processes to ensure compliance with the System Security Plan (Paragraph 4.4.5, System Security). The Contractor shall conduct semi-annual audits of the backup and recovery processes to ensure compliance with the Backup and Recovery Plan (Paragraph 4.4.6, Backup and Recovery). The Contractor shall deliver Process Audit Reports.
- 3. The Contractor shall conduct Process Assurance activities in accordance with the Process Assurance Plan.
- 4. The Contractor shall develop, deliver, maintain and execute a Process Assurance WPU to supplement the Quality Assurance WPU and Master Work Plan as described in Paragraph 3.1.2, Master Work Plan.

5. The State will conduct semi-annual Configuration Management Process Audits as described in Paragraph 3.2.6, Configuration Management, to verify compliance with the Configuration Management Plan to ensure CIs are properly controlled. The State will conduct an annual audit of the Quality Assurance Process to ensure it is following the Quality Assurance Plan as described in Paragraph 5.3.1, Product Assurance. The Contractor shall provide access to work products and tools necessary to conduct process audits.

#### 5.3.4 Joint Reviews

Joint reviews will be held with the Contractor, State, and Project Office to evaluate the status and products of the Project and provide evidence that:

- They are complete
- They comply with their standards and specifications
- Changes to them are properly implemented and affect only those areas identified by the Configuration Management Process
- They adhere to applicable schedules
- They are ready for the next activity
- The development, operation, or maintenance is being conducted according to the plans, schedules, standards, and guidelines of the Project
- 1. The Contractor shall conduct Technical Reviews in accordance with IEEE 12207, Paragraph 6.6.1, Joint Review Process and IEEE 12207, Paragraph 6.6.3, Technical Reviews. Upon completion of each review, the Contractor shall develop Technical Review Reports in accordance with IEEE 1028-1997, Standard for Software Reviews, Paragraph 5.7, Technical Reviews, Output.

# 5.3.4.1 Inspections

Inspections are done to verify elements of design or code that need scrutiny that testing alone would not provide. Inspections will be held to:

- Verify that the software product satisfies its specifications
- Verify that the software product satisfies quality attributes
- Verify that the software product conforms to regulations, standards, guidelines, plans, and procedures
- Identify deviations from standards and specifications
- 1. As part of the Verification and Validation Plan, the Contractor shall identify elements of design and source code that would be subject to inspection. The Contractor shall participate in and provide data collection for inspections in accordance with IEEE 1028, Paragraph 6, Inspections.

## 5.3.4.2 Walk-Throughs

- 1. The Contractor shall conduct high-level walk-throughs to help evaluate the software products in accordance with IEEE 1028, Paragraph 7, Walk-throughs. The walk-throughs shall be conducted prior to the State evaluation of major work products to include:
  - a. Requirements Specifications
  - b. Design Descriptions
  - c. Source Code
  - d. Test Documentation
  - e. Build and Installation Procedures.
- 2. The walk-through shall familiarize the State reviewer(s) with the basic content, structure, and logic of the work product. These walk-throughs are not intended to be an in-depth review for anomaly detection. Upon completion of each walk-through, the Contractor shall prepare and deliver minutes to note any decisions and identified actions arising during the walk-through meeting.

#### 5.3.4.3 Milestone Reviews

- 1. Milestones are important or key events to be realized or achieved by the Contractor and the State. Milestones are acknowledged benchmarks of Contractor progress and achievement. Milestone completion shall be acknowledged by the Contractor to the State via formal written letter stating the milestone(s) achieved and the date(s) of accomplishment. Formal written acknowledgement of milestone completion by the State to the Contractor is required for payment purposes. As a minimum the Project shall have milestone reviews for:
  - a. Project Initiation Review (Paragraph 3.3)
  - b. System Development Milestones:
    - i) System Requirements Validation Review (Paragraph 4.1.2)
    - ii) General System Design Review (Paragraph 4.1.4)
    - iii) Detailed System Design Review (Paragraph 4.1.5)
    - iv) Coding and Documentation Review (Paragraph 4.1.6)
    - v) Integration Test Review (Paragraph 4.2.4)
    - vi) Functional Test Review (Paragraph 4.2.5.1)
    - vii) User Acceptance Test Review (Paragraph 4.2.5.4)
    - viii) Pilot Operation Review (Paragraph 4.5.6)
    - ix) Release Readiness Review (Paragraph 4.2.6)
  - c. System Implementation Reviews
    - i) Data Cleanup Review (Paragraph 4.5.4.1)
    - ii) Data Conversion Review (Paragraph 4.5.4.2)
    - iii) County Deployment Readiness Review (Paragraph 4.5.7.2, County Deployment Execution)
    - iv) CDSS Deployment Readiness Review (Paragraph 4.5.8.2, CDSS Deployment Execution)

- v) Site Readiness Report Review (Paragraphs 4.5.7.3, County Onsite Support and 4.5.8.3, CDSS Onsite Support)
- vi) Post Site Implementation Review (Paragraph 4.5.10, Paragraph 4.3.5.3)
- vii) Post Statewide Implementation Review (Paragraph 4.5.10)
- d. System Maintenance Maintenance Release Milestones (for each Maintenance Release) as described in Paragraph 4.3, System Maintenance and Enhancements and subparagraphs)
  - i) Release Initiation and Planning Meeting (Paragraph 4.3.5.1, Release Management Planning)
  - ii) For Quarterly Release Reviews (Paragraph 4.3.5.3, Quarterly Release Tailoring) the Contractor shall include:
    - (1) Release Analysis and Design Review
    - (2) Modification Development and Test Readiness Review
    - (3) Test Review and Release Readiness Evaluation Review
    - (4) Post Statewide Implementation Review
  - iii) For Monthly Release Reviews (Paragraph 4.3.5.4, Monthly Release Tailoring) the Contractor shall include:
    - (1) Release Readiness Review (Paragraph 4.2.6)
    - (2) Post Statewide Implementation Review (Paragraph 4.5.10)
- e. Project Closeout Review (Paragraph 3.4)
- f. Post Installation Review (Paragraph 4.5.5, Release Installation)
- g. Production System Readiness Review (Paragraph 4.5.4.3, Site Preparation)
- 2. For each milestone review, the Contractor shall hold one or more meetings. The meetings shall accomplish the following goals:
  - a. Ensure activities identified in the Project plans were successfully completed
  - b. Evaluate work products to determine if:
    - i) The work product is complete
    - ii) The work product conforms to the regulations, standards, guidelines, plans and procedures applicable to the Project
    - iii) The work product is suitable for its intended use
    - iv) The work product is ready for the next activity
  - c. Identify Anomalies
  - d. Generate a list of action items
  - e. Document the meeting.
- 3. The Contractor shall prepare agendas and minutes for each review. The Contractor shall make work products available for review prior to each release cycle milestone in accordance with the agreed work plan. The State quality assurance group will review work products and conduct process audits to ensure they meet specified requirements of that milestone and provide a report to the State Project Manager. Based on the review report and information

presented by the Contractor at the review meetings, the State Project Manager will judge whether the Contractor can proceed to the next milestone.

4. The State Project Manager or his/her designee will provide the Contractor with a Formal written acknowledgement of milestone completion within one (1) business day of the meeting. If the milestone is disapproved, the Contractor shall provide a Corrective Action Plan within two (2) days of receiving the disapproval memo. The State Project Manager will review the Corrective Action Plan and if he/she approves, the Contractor shall execute the plan and conduct a second milestone review at the end of that process.

### 5.3.4.4 Scheduled Reviews

- 1. The Contractor will participate in the following routine review:
  - a. Quarterly Project Management Reviews (Paragraph 3.2.9)

## 5.3.5 Quality Reporting and Metrics

- 1. The Contractor shall summarize quality assurance activities in the Monthly Project Status Report.
- 2. The Contractor shall report product quality metrics monthly to include:
  - a. Defect discovery metrics:
    - i. Number of new defects in the reporting period by severity. The severity is Priority one (1) through six (6) as defined in Paragraph 3.2.4, Issue Management.
    - ii) The number of defects found in current month and compared to previous twelve (12) months.
    - iii) Number of new defects caused by fixes to previous problems
  - b. Defect Removal efficiency
    - i) Number of outstanding defects, by severity.
    - ii) Average age of outstanding defects. This metric measures the average age in days of all outstanding defects by severity. Defect removal efficiency is defined as the elapsed time from defect identification to successful testing and then to implementation. The Contractor shall also calculate the average for the current quarter and compare to the previous four quarters.
    - iii) Reported and corrected defect ratio. This metric shows the number of defects reported in a given month and the number of defects corrected in a given month. It is a non-cumulative metric.

# 5.4 Subcontractor Management

1. The Contractor shall be responsible for the coordination, control, and performance of Subcontractors, if any. The Subcontractor shall be subject to the same standards as the Contractor. The Contractor shall prepare and execute a Subcontractor Management Plan in accordance with IEEE 1058, PMBOK Chapter 12.1.3.1, Procurement Management and PMBOK Chapter 12.5, Contract Administration.

## 5.5 Process Improvement

- 1. The Contractor shall develop, deliver, maintain and execute a Process Improvement Plan in accordance with IEEE 1058. The Process Improvement Plan shall center on improving the business processes associated with the CMIPS II system to include county and State IHSS/PCSP offices. The Contractor shall maintain and update a CMIPS II Future Vision annually based on focus group inputs and county and State review.
- 2. The Contractor shall conduct annual surveys to improve forms and reports. The Contractor shall conduct an annual forms focus group inviting a minimum of twenty (20) counties and ten (10) CDSS staff. The forms focus group will identify additions, changes, and deletions to forms. The Contractor shall develop, deliver, and maintain a Forms Improvement Report for each forms focus group. The Contractor shall conduct an annual reports focus group inviting a minimum of twenty (20) counties and ten (10) CDSS staff. The reports focus group will identify additions, changes, and deletions to forms. The Contractor shall develop, deliver, and maintain a Reports Improvement Report for each forms focus group.
- 3. The contractor shall detail in the Process Improvement Plan how any individual improvement effort can be quantified.
- 4. The contractor shall evaluate its cost and effort estimate methods at least annually used for system development and Maintenance Release planning.
- 5. The Contractor shall prepare and deliver a Process Improvement Report for each process improvement effort.
- 6. The Contractor shall have a method to measure the accuracy of the modification and release estimation process and recommend improvements as needed.
- 7. The contractor may through the duration of the Contract deliver process improvement proposals for potential incentive payments as defined in Section 11, MODEL CONTRACT, Section 4.6, Incentives.
  - a. If the State approves a proposal, the Contractor shall implement the proposal and shall monitor progress against the metrics defined in the proposal.
  - b. Two months after the implementation of each proposal, and monthly thereafter, the Contractor shall send a report to the State that shows the monthly savings from each process improvement project, and the total monthly savings and total cumulative savings from all process improvement projects that have been implemented within the last two (2) years and are still in operation.

### 5.6 Facilities

There are five (5) organizations that will provide facilities for this Contract as summarized in Table 15.

### **Table 14. Facility Responsibility Summary**

FACILITY	RESPONSIBILITY
Project Office Space	CMIPS Project Office
Contractor Office Space	CMIPS Project Office
Data Center	HHSDC
Timesheet Facility	Contractor
CDSS Office Space	CDSS APB
County Office Space	County Welfare Dept

- 1. The Contractor core staff shall be co-located with the CMIPS Project Office within 15 business days of Contract execution. Core staff includes all Contractor Key Staff and the staff that will be supporting Project Management, Control Processes, Requirements Management, User Acceptance Testing, Statewide Implementation, Program Support, and ongoing System Maintenance and Enhancement as defined in this RFP. The Contractor may separately house contractor auxiliary staff working the project for less than six (6) months for peak activities. The CMIPS Project Office will provide space, furniture, utilities, and telephones (for business use) for up to forty (40) contract staff at 2525 Natomas Park Dr, Suite 100, Sacramento, California, 95833.
- 2. The site and facility for the Data Center shall be provided by the HHSDC and Timesheet Processing shall be provided by the Contractor. The Timesheet Processing facilities shall be within California. The Data Center and Timesheet functions do not have to be at the same facility. All staff associated with those functions shall be housed by the hosting organization at the appropriate facility.
- 3. The CDSS APB will provide facilities for the IHSS/PCSP State staff.
- 4. The County Welfare Departments will provide facilities for the county administration of the IHSS/PCSP Program.

### 5.7 Hardware and Software

The CMIPS II equipment will be hosted in three (3) major organizations: the Contractor will host the timesheet processing system, HHSDC will host the enterprise equipment and provide the WAN, and the County Welfare Office will host a LAN, desktop equipment, and printer architecture. Other equipment to support this Contract will be hosted at the CMIPS Project Office and CDSS APB. The major responsibility for this equipment is summarized in Table 16.

**Table 15. Equipment Responsibility Summary** 

EQUIPMENT DESCRIPTION	LOCATION	PURCHASED BY	MAINTAINED BY	OWNED BY
ENTERPRISE				
Production Hardware	Data Center	Contractor	HHSDC	HHSDC
Timesheet Processing Hardware	Contractor	Contractor	Contractor	HHSDC
Timesheet Processing Software	Contractor	Contractor	Contractor	HHSDC
Web Server Hardware	Data Center	Contractor	Contractor	HHSDC

EQUIPMENT DESCRIPTION	LOCATION	PURCHASED BY	MAINTAINED BY	OWNED BY
Web Server Software	Data Center	Contractor	Contractor	HHSDC
COUNTY				
Workstations	County	County	County	County
Local Printers	County	N/A	N/A	County
Forms Printers	County	Contractor	Contractor	County
Forms Server	County	Contractor	Contractor	County
Forms Production Software	County	Contractor	Contractor	County
County Local Area Network	County	Contractor	Contractor	County
WIDE AREA NETWORK (WAN)				
WAN	HHSDC	HHSDC	HHSDC	HHSDC
CDSS-APB				
CDSS Workstations	CDSS	Contractor	Contractor	CDSS
CDSS Printers	CDSS	Contractor	Contractor	CDSS
CDSS Server Hardware	CDSS	Contractor	Contractor	CDSS
CDSS Server Software	CDSS	Contractor	Contractor	CDSS
CDSS LAN	CDSS	N/A	N/A	CDSS
DEVELOPMENT				
Project Office Workstations	Project	Project	Project	Project
Project Office Printers	Project	Project	Project	Project
Project Office Software	Project	Project	Project	Project
Project Office Server	Project	Project	Project	Project
Project Office E-Mail	Project	Project	Project	Project
Contractor Workstations	Project	Contractor	Contractor	Contractor
Contractor Printers	Project	Contractor	Contractor	Contractor
Contractor Server	Contractor	Contractor	Contractor	Contractor
Contractor E-Mail	Contractor	Contractor	Contractor	Contractor
DDI Development Hardware	D/C or Project	Contractor	Contractor	Contractor
DDI Development Software	D/C or Project	Contractor	Contractor	Contractor
DDI Test Hardware	D/C or Project	Contractor	Contractor	Contractor
DDI Test Software	D/C or Project	Contractor	Contractor	Contractor
M&O Development Hardware	D/C or Project	Contractor	Contractor	HHSDC
M&O Development Software	D/C or Project	Contractor	Contractor	HHSDC
M&O Test Hardware	D/C or Project	Contractor	Contractor	HHSDC
M&O Test Software	D/C or Project	Contractor	Contractor	HHSDC

### 5.7.1 Purchase

- 1. The Contractor, with support from the Data Center, shall purchase the CMIPS II enterprise equipment and software specified in the Architecture Design Specification and Capacity Management Plan.
- 2. The Contractor or manufacturer certified vendor staff shall install, test and certify the CMIPS II equipment.

- 3. The Contractor shall coordinate with the county welfare departments to ensure they purchase, install, and maintain the local area networks and desktop equipment and software that meet the specifications in the Architecture Design Specification and Capacity Management Plan.
- 4. The Contractor shall purchase, install, certify and maintain equipment and software for the forms architecture at the county sites. This shall include replacement of the seventy (70) printers currently installed and installation of an additional thirteen (13) at counties that currently have no print capabilities. The locations and number of printers can be found in the Bidder's Library, Artifact 13 Incumbent Contractor Number and Location of Printers.
- 5. HHSDC will purchase, install, and maintain the WAN equipment and software that meets the requirements of the Capacity Management Plan.
- 6. The Contractor shall transfer ownership of the hardware and software required for production and M&O activities, including timesheet processing, to the State
- 7. The Contractor shall purchase, install, and maintain any office equipment and software to be used by the Contractor such as workstations, printers, email server, and copiers, etc. The CMIPS Project Office will provide one telephone and one LAN connection at each staff desk in the CMIPS Project Office facility.
- 8. The State will retain the option of purchasing hardware and software externally to the Contract to be determined at the time of purchase.

## **5.7.2 Hardware Support**

- 1. The Contractor shall manage the maintenance of all system hardware as part of the base service level including coordination of maintenance activities with HHSDC and interface entities. The Project Maintenance Plan shall include requirements for HHSDC to:
  - a. Maintain hardware while still meeting agreed service levels
  - b. Perform maintenance
  - c. Report completed and planned maintenance activities to the State.
- 2. The Contractor shall prepare a work plan for each hardware modification and provide the State with monthly updates in the Monthly Project Status Report.
- 3. The Contractor shall maintain hardware maintenance agreements, warranty service and support contracts for all systems.

#### **5.7.3 Software Maintenance**

- 1. The Contractor shall maintain and manage, in coordination with HHSDC, system software including but not limited to, enterprise management agents, COTS, developed software, and middleware tools as part of the base level of service. The Contractor shall maintain all tools and related data used for CMIPS II development and documentation. In the Project Maintenance Plan, the Contractor shall describe how it will perform the following maintenance tasks:
  - a. Identify software and hardware warranty and maintenance periods and renewals

- b. Maintain all licensing agreements, warranty service and support contracts
- c. Manage and perform all changes to supporting software and hardware
- d. Coordinate software changes using approved Configuration Management processes
- e. Report on all completed or planned system support maintenance activities to the State on a monthly basis.
- 2. HHSDC will support the operating system and database engine. However the Contractor shall support and maintain individual database instances.
- 3. The Contractor shall upgrade COTS software to the most current version within eighteen (18) months of the software release on the specific platform unless otherwise directed by the State Project Manager.
- 4. The Contractor shall prepare a work plan for each major supporting software modification and provide the State with updates in the weekly project status meeting and the Monthly Project Status Report.
- 5. In the event that one (1) or more software products is withdrawn from public sale by the manufacturer, the Contractor shall define, deliver for written State approval, and execute a plan to implement an alternate solution within twenty-four (24) months of the withdrawal notice.

#### 5.7.4 CDSS-APB Hardware and Software

- 1. The Contractor shall procure, install and maintain personal computers and software for the CDSS Adult Program Branch at their office.
  - a. The Contractor shall initially supply forty-three (43) computers and ancillary devices that meet the Contractor defined specifications required for the CMIPS II application.
  - b. The Contractor shall initially provide and support seven (7) printers with at least three (3) printers with color print capability.
  - c. The Contractor shall provide desktop software for all computers to include:
    - i) Microsoft Operating System
    - ii) MS Office (Word, Excel, PowerPoint & Outlook)
    - iii) MS Internet Explorer
    - iv) WinZip file compression
    - v) Norton Anti-Virus
    - vi) Acrobat Reader.
  - d. The Contractor shall provide specified computers with optional software to include:
    - i) MS Project (ten [10] copies)
    - ii) MS Access (ten [10] copies)
    - iii) Visio (five [5] copies)
    - iv) Adobe Acrobat (five [5] copies).
  - e. The Contractor shall replace the existing Novel LAN with MS Back Office Client Access.

# Section 6 – Technical Requirements – Statement of Work (SOW)

- f. All equipment and software shall meet the office standards established in the "CDSS Information Technology Standard" available in the Bidder's Library, Artifact 14 CDSS Information Technology Standard.
- g. The supplied equipment shall be refreshed on a five (5)-year cycle.